



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632-9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO24431**

Purchase Order Date 6/2/2014

PO Print Date 6/2/2014

Page Number 1 of 5

Order From :

B/E AEROSPACE INC
88289 EXPEDITE WAY
CHICAGO, IL 33172
USA

VU-BEA001

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

129-384

Contact Name

Vendor Phone

305-925-2600

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms

Net 30

Currency

USD

FOB

FCA - (Free Carrier)

Ship To Contact

Ship To Phone

Ship Via:

FedEx PI collect

Ship Acct:

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	AN3C21A 25	BOLT	6/4/2014 Yes 6/4/2014		20.00 Each ✓	\$1.50	\$30.00 ✓
Line Total:							\$30.00
2	AN4-12A 344	Bolt	6/4/2014 Yes 6/4/2014	FN	200.00 Each ✓	\$0.18	\$36.00 ✓
Line Total:							\$36.00
3	AN4-14A 344	Bolt	6/4/2014 Yes 6/4/2014	FN	200.00 Each ✓	\$0.22	\$44.00 ✓
Line Total:							\$44.00

SP 14-6-4

Note:

6/2/2014



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Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
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Order From :

B/E AEROSPACE INC
88289 EXPEDITE WAY
CHICAGO, IL 33172
USA

VU-BEA001

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone 305-925-2600

Ship To Contact

Ship To Phone

Ship Via: FedEx PI collect

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax # 10127-2607

Terms Net 30

Currency USD

FOB FCA - (Free Carrier)

Line Total: \$44.00

4	AN4C21A	BOLT	6/4/2014	50.00	✓	\$1.27	\$63.50
			Yes	Each			
			6/4/2014				

Line Total: \$63.50

5	AN5-13A	BOLT	6/4/2014 FN	30.00	✓	\$0.50	\$15.00
			Yes	Each			
			6/4/2014				

Line Total: \$15.00

6	AN6-13A	BOLT	6/4/2014	50.00	✓	\$0.52	\$26.00
			Yes	Each			
			6/4/2014				

Line Total: \$26.00

SP 14-6-4

Note:

6/2/2014



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88289 EXPEDITE WAY
CHICAGO, IL 33172
USA

VU-BEA001

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone 305-925-2600

Ship To Contact

Ship To Phone

Ship Via: FedEx PI collect

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax # 10127-2607

Terms Net 30

Currency USD

FOB FCA - (Free Carrier)

7	NAS1149DN949J	Washer	6/4/2014 Yes 6/4/2014	FN	200.00 Each	✓	\$0.13	\$26.00	✓
Line Total:								\$26.00	
8	NAS388-6-8P	SCREW	6/4/2014 Yes 6/4/2014		75.00 Each	✓	\$4.95	\$371.25	✓
Line Total:								\$371.25	
9	NAS391B6P	Washer	6/4/2014 Yes 6/4/2014		75.00 Each	✓	\$0.25	\$18.75	✓
Line Total:								\$18.75	
10	NAS1611-003	O-RING	6/4/2014 Yes 6/4/2014		300.00 Each		\$0.35	\$105.00	

Note:

6/2/2014



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PURCHASE ORDER

Purchase Order ID: PO24431

Purchase Order Date 6/2/2014

PO Print Date 6/2/2014

Page Number 4 of 5

Order From :

B/E AEROSPACE INC
88289 EXPEDITE WAY
CHICAGO, IL 33172
USA

VU-BEA001

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone 305-925-2600

Ship To Contact**Ship To Phone**

Ship Via: FedEx PI collect

Ship Acct:**Buyer**

Chantal Lavoie

Customer POID**Customer Tax #**

10127-2607

Terms

Net 30

Currency

USD

FOB

FCA - (Free Carrier)

Line Total: \$105.00

11 NAS1611-005

O-RING

6/4/2014

Yes

6/4/2014

300.00

Each

\$0.35

\$105.00

Line Total: \$105.00

12 71401-45

PROCUREMENT
QUALITY CLAUSES

6/4/2014

No

6/4/2014

1.00

\$0.00

\$0.00

Procurement Quality Clauses

A005 RIGHT OF ENTRY

A012 CHEMICAL AND PHYSICAL TEST REPORTS

A016 PERSONNEL QUALIFICATION

A026 CERTIFICATION OF MATERIAL CONFORMANCE

A032 PUBLIC LAW 101-592 FASTENER QUALITY ACT

A033 STATEMENT OF CONFORMITY/TEST RECORDS

FOR NAS, AN and MS FASTENERS

A040 NOTIFICATION OF QUALITY ESCAPE

A041 QUALITY MANAGEMENT SYSTEM

A042 DART NOTIFICATION BY SUPPLIER

A043 RETENTION OF QUALITY DOCUMENTS

Note:

6/2/2014

Airfasco Industries, Inc.

2655 Harrison Ave SW
Canton, OH 44706
Ph: 330-430-6190, Fax: 330-430-6199

Packing Slip

Original

Invoice #: 115751

Invoice Date: 10/6/2009

Time: 11:12:05 AM

Page: 1

To:

M&M AEROSPACE HARDWARE
PO BOX 025263
MIAMI, FL 33102
USA
Ph: 305-592-5155 Fax: 305-591-8357 PURCHAS

Ship To:

M&M AEROSPACE HARDWARE
10000 NW 15TH TERRACE
MIAMI, FL 33172

Cust. PO#: OHE167

Terms: NET 60

Ship Via: FEDEX GROUND COShip Via Acc: 0331-0149-0

Order Date: 10/15/2008

of Items: 2

of Boxes: 10

Weight:

Prepared By:

Sales Order: 91907

Ship Log #: 1

Ship Order:

Customer #: 12726

VAT #:

Cust VAT #:

Ship Date: 10/6/2009

Buyer:

FOB:

AWB:

Shipment:

Item	Part Number/Description	Shipped	BackOrd	CD			Unit Price	UOM	Total Amt
3	AN7-21A BOLT, AN Loc/Whse: Control #: 0-0	0	10000	NE				EA	
9	AN4C21A BOLT, AN Loc/Whse: Control #: 142534-1 L-16613 TEST REPORT L-16613 AIRFASCO TERMS AND REQUIREMENTS FOR APPROVAL OF PRODUCT, PROCEDURES, AND EQUIPMENT: THE QUALIFICATION OF PERSONNEL AND QUALITY MANAGEMENT SYSTEM REQUIREMENTS, THE POSITIVE AND APPLICABLE SPECIFICATIONS, DRAWINGS, PROCESS REQUIREMENTS, INSPECTION INSTRUCTIONS AND OTHER RELEVANT TECHNICAL DATA, THE TEST SPECIMENS FOR DESIGN APPROVAL, INSPECTION, INVESTIGATION, OR AUDITING, RELATIVE TO SUPPLIER NOTIFICATION TO ORGANIZATION OF NON-CONFORMING PRODUCT AND ARRANGEMENTS FOR ORGANIZATION APPROVAL OF SUPPLIER NON-CONFORMING MATERIAL, THE SUPPLIER TO NOTIFY THE ORGANIZATION OF CHANGES IN PRODUCT.	10000	0	NE				EA	

C OF C ENCLOSED

10 BOXES

1 PALLET

PARTS MADE IN USA

THANK YOU!

Airfasco Industries, Inc.

2655 Harrison Ave SW
Canton, OH 44706
Ph: 330-430-6190, Fax: 330-430-6199,

Packing Slip

Original

Invoice #: 115751

Invoice Date: 10/6/2009

Time: 11:12:06 AM

Page: 2

To:

M&M AEROSPACE HARDWARE
PO BOX 025263
MIAMI, FL 33102
USA
Ph: 305-592-5155 Fax: 305-591-8357 PURCHAS

Ship To:

M&M AEROSPACE HARDWARE
10000 NW 15TH TERRACE
MIAMI, FL 33172

Cust. PO#: OHE167

Terms: NET 60

Ship Via: FEDEX GROUND COShip Via Acc: 0331-0149-0

Order Date: 10/15/2008

of Items: 2

of Boxes: 10

Weight:

Prepared By:

Sales Order: 91907

Ship Log #: 1

Ship Order:

Customer #: 12726

VAT #:

Cust VAT #:

Ship Date: 10/6/2009

Buyer:

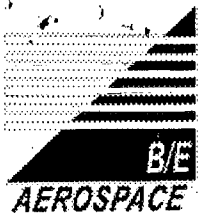
FOB:

AWB:

Shipment:

Item	Part Number/Description	Shipped	BackOrd	CD			Unit Price	UOM	Total Amt
	PROCESS DEFINITION AND, WHERE REQUIRED, OBTAIN ORGANIZATION APPROVAL, THE RIGHT OF ACCESS BY THE ORGANIZATION, THEIR CUSTOMER, AND REGULATORY AUTHORITIES TO ALL FACILITIES INVOLVED IN THE ORDER AND ALL APPLICABLE RECORDS, THE SUPPLIER TO FLOW DOWN TO SUB-TIER SUPPLIERS THE APPLICABLE REQUIREMENTS IN THE PURCHASING DOCUMENTS, INCLUDING KEY CHARACTERISTICS WHERE REQUIRED.								

C OF C ENCLOSED
10 BOXES
1 PALLET
PARTS MADE IN USA
THANK YOU!



B/E Aerospace, Inc.

Page: 1 of 1

CONSUMABLES MANAGEMENT

P.O. Box 085263, Miami, FL 33102-5263 • Tel: 305.925.2600 • Fax: 305.507.7191
Plant Location: 10000 N.W. 15th Terrace, Miami, FL 33172 • SITA: MIAMMCR
www.beconsumables.com

Shipped From: 10000 NW 15 TERRACE, MIAMI, FL 33172


Material Certification

The items set forth on the purchase order referred to below have been visually inspected and the dimensions thereof have been measured by us, and based on the aforesaid, as well as the representation made to us by the manufacturers of the items subject of such purchase order, we hereby certify that such items are in conformity with all current governmental and manufacturer's requirements, specifications, drawings, and conform to the purchase order requirements. Said items are in new condition and have not been obtained from any U.S. Government or Military source and are traceable to B/E Aerospace, Inc.

FIRM: DART AEROSPACE LTD

PURCHASE ORDER#: PO24431

LINE#	QUANTITY	U/M	PART-NUMBER	CUST REF#	LOT-NUMBER	MANUFACTURER	CCODE	MFR DATE	EXP DATE
5	30	EA	ANS-13A		64893	MAC FASTENERS	ORPT4		


Jason Lewis

Vice President of Quality

06/03/14

MAC FASTENERS, INC.
1110 ENTERPRISE
OTTAWA, KANSAS 66067

**CERTIFICATE OF CONFORMANCE
AND
MANUFACTURER'S AFFIDAVIT**

CUSTOMER: B/E AEROSPACE

PO: 0KRE81

PART NUMBER: AN5-13A

REV: 2

LOT NUMBER: 64893

MANUFACTURED QUANTITY: 25,000

MILL HEAT NUMBER: 8192215

COUNTRY OF ORIGIN: UNITED STATES OF AMERICA

DFARS 252.225.7009 Compliant

MERCURY FREE CERTIFICATION

MacFasteners Inc. certifies that the parts referenced in the above lot number do not contain Mercury or Mercury compounds, and were manufactured in a Mercury free environment.

We certify that the parts furnished against the above referenced purchase order were manufactured by MAC FASTENERS, INC. within the United States, and were processed in accordance with all applicable drawings and specifications.

Objective evidence of compliance is on file, subject to examination upon request.

DATE: 09/05/13


QUALITY ASSURANCE REPRESENTATIVE

MacFasteners, Inc. is an AS9100C Registered Company- SAI GLOBAL - 0058029

Receiving Report

Date: 14-6-4

Batch No: 129384

Supplier: B/E

Dart P/O: 24431

Packing Slip: Yes ☒ No ☐
 Invoice: Yes ☒ No ☐
 Receipt: Cash ☐ Cr ☒
 New Supplier Yes ☐ No ☒

Release Note Attached: Yes ☒ No ☐ N/A ☐
 Waybill Attached: Yes ☒ No ☐ N/A ☐
 Shipment Complete: Yes ☐ No ☒ N/A ☒
 QC18 Inspection ☐ N/A ☒
 Work Order ☐ N/A ☒

Discrepancies

Part Number	Description	Quantity Ordered	Quantity Rec'd	Quantity Short	Quantity Inspected	Quantity Rejected	Comment / NCR Number
10451611-03	CRing	300	0		300		

Initials of Receiver

QC12

SP

Production/Admin: 14-6-4
 Date 14-6-4
 Received/Costing SP
 Initial SP

Location



B/E Aerospace, Inc.

Page: 1 of 1

CONSUMABLES MANAGEMENT

P.O. Box 025263, Miami, FL 33102-5263 • Tel: 305.925.2600 • Fax: 305.507.7191
Plant Location: 10000 N.W. 15th Terrace, Miami, FL 33172 • SITA: MIAMMCR
www.beconsumables.com

Shipped From: 10000 NW 15 TERRACE, MIAMI, FL 33172


Material Certification

The items set forth on the purchase order referred to below have been visually inspected and the dimensions thereof have been measured by us, and based on the aforesaid, as well as the representation made to us by the manufacturers of the items subject of such purchase order, we hereby certify that such items are in conformity with all current governmental and manufacturer's requirements, specifications, drawings, and conform to the purchase order requirements. Said items are in new condition and have not been obtained from any U.S. Government or Military source and are traceable to B/E Aerospace, Inc.

FIRM: DART AEROSPACE LTD

PURCHASE ORDER#: PO24431

LINE#	QUANTITY	U/M	PART-NUMBER	CUST REF#	LOT-NUMBER	MANUFACTURER	CCODE	MFR DATE	EXP DATE
3	200	EA	AN4-14A		68538	MAC FASTENERS	ORFT4		


Jason Lewis
Vice President of Quality

06/03/14

MACFASTENERS, INC.

1110 Enterprise Street

Ottawa, KS 66067

Phone: 785-242-8812

Fax: 785-242-4616

Packing List**Bill B/E AEROSPACE CONSUMABLES MGMT****To: 10000 NW 15TH TERRACE****MIAMI, FL 33172****Ship B/E AEROSPACE CONSUMABLES MGMT****To: 9835 NW 14th Street****Miami, FL 33172****United States****Shipment No: 62095****Shipment Date: 01/23/14****Ship Via: United Parcel Service****Order Number: 48480****Order Date: 07/22/13****Customer Code: BE AEROSPACE****Phone: (305) 925-2600****PO Number: 0PZH84****Terms: Net 30 Days**

LOT #68538

<u>Item</u>	<u>Quantity</u>				<u>Unit</u>	<u>Description</u>	<u>Job Number</u>
	<u>Open</u>	<u>Shipped</u>	<u>Back Ord</u>	<u>Canceled</u>			
1	100,000	110,000	0		M	AN4-14A Bolt, machine-- Aircraft	68538

MAC FASTENERS, INC.
1110 ENTERPRISE
OTTAWA, KANSAS 66067

**CERTIFICATE OF CONFORMANCE
AND
MANUFACTURER'S AFFIDAVIT**

CUSTOMER: B/E AEROSPACE

PO: 0PZH84

PART NUMBER: AN4-14A

REV: 2

LOT NUMBER: 68538

MANUFACTURED QUANTITY: 110,000

MILL HEAT NUMBER: 8193290

COUNTRY OF ORIGIN: UNITED STATES OF AMERICA

DFARS 252.225.7009 Compliant

MERCURY FREE CERTIFICATION

MacFasteners Inc. certifies that the parts referenced in the above lot number do not contain Mercury or Mercury compounds, and were manufactured in a Mercury free environment.

We certify that the parts furnished against the above referenced purchase order were manufactured by MAC FASTENERS, INC. within the United States, and were processed in accordance with all applicable drawings and specifications.

Objective evidence of compliance is on file, subject to examination upon request.

DATE: 01/22/14


QUALITY ASSURANCE REPRESENTATIVE

MacFasteners, Inc. is an AS9100C Registered Company- SAI GLOBAL - 0058029

MAC FASTENERS, INC.
1110 EAST ENTERPRISE
OTTAWA, KS 66067

CHEMICAL & PHYSICAL TEST REPORT

CUSTOMER B/E AEROSPACE	PO NUMBER 0PZH84	MFG QUANTITY 110,000	DATE 01/22/14
PART NUMBER AN4-14A	REV 2	LOT NO 68538	PROCUREMENT SPEC NASM6812

MATERIAL TYPE 8740				MATERIAL SPECIFICATION MIL-S-6049/AMS6322				MILL HEAT NUMBER 8193290			SUPPLIER JOHNSTOWN		
C	Si	Mn	P	S	Cu	Ni	Cr	Mo	V	B	Fe	Al	Ti
.40	.24	.77	.010	.010	.10	.52	.58	.26	.002			.023	
	Co	N	Bi	Pb	Mg	Zn		Nb	Sn			Other	
		.0060							.005				

MECHANICAL TEST RESULTS - TESTING PER NASM1312

ULTIMATE TENSILE STRENGTH POUNDS	
5,770	
5,710	
5,720	
5,730	
5,750	
MIN. REQ.	4,080

DOUBLE SHEAR STRENGTH POUNDS / PSI	
8,180	
8,130	
8,140	
8,160	
8,190	
MIN. REQ.	7,360


HARDNESS	
ROCKWELL "C" SCALE	
REQ.	26 - 32 HRC
SAMPLE SIZE	5
ACTUAL RESULTS	
28 - 30 HRC	

METALLURGICAL EXAMINATION			
Discontinuities	<input checked="" type="checkbox"/>	Carb/Decarb	<input checked="" type="checkbox"/>
Grain Flow	<input checked="" type="checkbox"/>	Microstructure	<input checked="" type="checkbox"/>
Grain Size	<input checked="" type="checkbox"/>	Appearance	<input checked="" type="checkbox"/>
Thread Inspection System <input type="checkbox"/> 21 System <input checked="" type="checkbox"/> 22 System <input type="checkbox"/> 23 FED-STD-H28/20 - ASME B1.3			

NDT/ ADDITIONAL TESTS	
Magnetic Particle Inspection per ASTM E1444	<input checked="" type="checkbox"/>
Liquid Penetrant Inspection per ASTM E1417	<input type="checkbox"/>
Recess Torque Test	<input type="checkbox"/>
Head Marking	<input checked="" type="checkbox"/>
Magnetic Permeability ASTM A342 less than 2.0	<input type="checkbox"/>

TEST CERTIFICATION

WE CERTIFY THAT THE PART NUMBER, LOT NUMBER, AND SAMPLES REFERENCED ABOVE HAVE BEEN TESTED IN ACCORDANCE WITH THE APPLICABLE SPECIFICATION FOR THE TESTS REPORTED HEREIN. THIS CERTIFICATION SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT THE APPROVAL OF MAC FASTENERS, INC.


Quality Assurance Representative

AS9100C REGISTERED
SAI GLOBAL - 0058029

MAC FASTENERS, INC.
1110 ENTERPRISE
OTTAWA, KANSAS 66067

HEAT TREAT CERTIFICATION

CUSTOMER: B/E AEROSPACE

DATE: 01/22/14

PO NUMBER: 0PZH84

MANUFACTURED QUANTITY: 110,000

PROCESSOR:

PAULO PRODUCTS KCMO - NADCAP ID 4679

LOT NUMBER: 68538

MATERIAL: TYPE 8740

PART NUMBER: AN4-14A

REVISION: 2

REQUIRED HARDNESS: 26 - 32 HRC

SAMPLE SIZE: 5

HARDNESS: 28 - 30 HRC

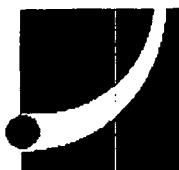
HEAT TREAT SPECIFICATION AS APPLICABLE: MIL-H-6875/AMS-H-6875/AMS2759/AMS5853/PS-1001

Notes:

The fasteners referenced in this report have been processed, inspected and certified by the Heat Treat Contractor in accordance with all applicable drawings and specifications. Heat Treatment has been verified in accordance with procurement specification and part drawing, by metallurgical and mechanical testing as applicable. Evidence of compliance as well as certification from the Heat Treat Contractor is on file and subject to examination upon request.


QUALITY ASSURANCE REPRESENTATIVE

MacFasteners, Inc. is an AS9100C Registered Company - SAI GLOBAL - 0058029



Johnstown Wire Technologies

124 Laurel Ave,
Johnstown, PA 15906

Phone: 814-532-5680
Fax: 814-532-5684

WORK ORDER
800310

TEST REPORT

LOT NUMBER
K-8193290

SALES ORDER / RLS
002318 / 1

SOLD TO

Mac Fasteners, Inc.
C/O TD Logistics Inc.
14505 W 100th Street
Lenexa, KS 66215
USA



CUSTOMER P.O. 50516	CUSTOMER PART 8740-.2465	QUANTITY 39,644 LBS	COILS 20	LADING NO 00119854	SHIPMENT DATE 09/20/2013							
SPECIFICATION MacFast-87246 AMS2301; AMS6322; AMS-S-6049A; MIL-S-6049A 8740 DFARS TS 95000 PSI Max Defense Federal Acquisition Regulation Supplement Silicon Killed Fine Grain Aircraft Quality/Cold Heading Quality Drawn From Annealed Rod Spherodize Annealed In Process Heavy Phos & Light Lube Ctd Size: .2465 +.0005 -.0005												
CERTIFICATION REQUIREMENTS												
Chemical												
C	Mn	P	S	Si	Al	Ni	Cr	Mo	Cu	V		
.40	.77	.010	.010	.24	.023	.52	.58	.26	.10	.002		
Cb	Ti	N	Sn									
.000	???????	.0060	.005									
Physical												
AMS 2301	J1	J10	J11	J12	J2	J3	J5	J4	J6	J7	J8	J9
0000	56	40	38	36	55	55	53	54	52	50	46	43
MacroClean E-381 111												
Mechanical												
TEST	UNITS	HIGH	LOW	AVERAGE								
Tensile Str	Lbs/SqIn	86000	84000	85000								
RA Per Cent	Percent	73.8	67.2	70.3								
Decarb FFD	Inches	.000	.000	.000								
Surface def. depth	Inches	.001	.001	.001								
Rod / Melt Source												
Rod Source Republic	Melt Source Republic	Country of Origin USA	Nafta Yes									
End of Certification												

I certify that the results are a true and correct copy of the records prepared and maintained by JOHNSTOWN WIRE TECHNOLOGIES in compliance with the requirements of the cited specification. Chemistry is as reported by the rod / bar supplier and is not in JWT A2LA accreditation. This test report cannot be reproduced or distributed except in full without the written permission of JOHNSTOWN WIRE TECHNOLOGIES. The test results certified herein relate only to the items tested.

Daniel J. Malik
Daniel J. Malik Director of Quality Assurance 81

Date Printed 09/20/2013



CERTIFICATE OF TESTS

1807 EAST 28TH ST.
PHONE: 330-438-3580LORAIN, OH 44055
FAX: 330-438-5605

REPUBLIC STEEL

6/24/2013
2:46:00 PM
PAGE 1 OF 2PURCHASE ORD: 84084
PART NUMBER: FXT40AA-375
ORDER NUMBER: 1547434 - 01
HEAT: 8193290PURCHASE ORDER DATE: 3/4/2013
ACCOUNT NUMBER: 5672-1921-01
SCHEDULE: 4927-93
REVISION: 1

CHARGE ADDRESS

JOHNSTOWN WIRE TECHNOLOGIES
124 LAUREL AVE
JOHNSTOWN, PA 15906

SHIP TO

JOHNSTOWN WIRE TECHNOLOGIES
EDWARD ZAPOLA
C/O C & BL RAILROAD
TRACK 629
JOHNSTOWN, PA 15901

MATERIAL DESCRIPTION

HOT ROLLED STEEL COILS ALLOY AMS 2301K JOHNSTOWN WIRE SPEC RW-100 REVISION DTD 04/21/04 EXC PARA
10.3 AMS 6322N EXC HARD JOHNSTOWN WIRE SPEC RW-005 REVISION DTD 12/31/00 EXC SURFACE DEFECTS
JOHNSTOWN WIRE SPEC PART NO. FXT40AA REVISION DTD 12/31/00 MIL S 6049A & AMD 1 COND B-1 EXC MARK &
UT WAIVED EF-AISI-8740-H FINE GRAIN VACUUM DEGAUSS AIRCRAFT QUALITY FIXED PRACTICE QUALITY
RESTRICTED CHEMISTRY RESTRICTED MAX INCIDENTAL ELEMENTS
SIZE: RDS .3750 DIAM X COIL
RDS 9.5250MM DIAM X COIL

LADLE CHEMISTRY %

C	MN	P	S	SI	CU	NI	CR
0.40	0.77	0.010	0.010	0.24	0.10	0.52	0.58
V	MO	SN	AL	B	CB	N	
0.002	0.26	0.005	0.023	0.0000	0.000	0.0060	

CALCULATED TESTS

REDUCTION RATIO 1,177.6 TO 1

AUSTENITIC GRAIN SIZE 5 OR FINER BASED ON A TOTAL ALUMINUM CONTENT EQUAL TO OR GREATER THAN .020% PER ASTM A29.

SEMI - FINISHED RESULTS

JOMINY HARDNESS TEST SAE J406/ASTM A255
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 18 20 22 24 26 28 30 32
56 55 55 54 53 52 50 46 43 40 38 36 34 33 32 31 30 30 29 29 29 28 28

MACRO ETCH TEST ASTM E381/MIL STD 430
ETCHANT: HCL TEMPERATURE: 170
S R C
AVG 1 1 1

MAGNETIC PARTICLE TEST AMS 2301 AMS2304 AMS2300
IND AVG IND AVG
FREQ FREQ SEV SEV
PCE 03 0 0 0 0

FINISHED SIZE RESULTS

DECARBURIZATION TEST SAE J419/ASTM E1077/JIS G0558
ETCHANT = NITAL MAGNIFICATION = 100X

	SPIKE	COMPLETE	TOTAL
	INCHES	INCHES	DEPTH
PCE 6581	0.002	0	0.002

G. KRUTH
DIRECTOR QUALITY ASSURANCE

BY DEBORAH STOKES



CERTIFICATE OF TESTS

1807 EAST 28TH ST.
PHONE: 330-438-5580

REPUBLIC STEEL

LORAIN, OH 44055
FAX: 330-438-5695

6/24/2013
2:46:00 PM
PAGE 2 OF 2

PURCHASE ORD: 84084
PART NUMBER: FKT40AA-.375
ORDER NUMBER: 1547434 - 01
HEAT: 8193290

PURCHASE ORDER DATE: 3/4/2013
ACCOUNT NUMBER: 5672-1921-01
SCHEDULE: 4927-93
REVISION: 1

CAPABLE OF SEAM DEPTH 14 MAX DIAMETER NOT LESS THAN .005 MAX

CHEMICAL ANALYSIS CONFORMS TO APPLICABLE SPECS: ASTM E415, LBL10129, LBL10130, ASTM E1019, LBL10158, LBL10114, AND ASTM E1085, LBL10184, LBL10188.

REPUBLIC STEEL HEREBY CERTIFIES THAT THE MATERIAL LISTED HEREIN HAS BEEN INSPECTED AND TESTED IN

NOTES (CONTINUED)
ACCORDANCE WITH THE METHODS PRESCRIBED IN THE GOVERNING SPECIFICATIONS AND BASED UPON THE RESULTS OF SUCH INSPECTION AND TESTING HAS BEEN APPROVED FOR CONFORMANCE TO THE SPECIFICATIONS.

CERTIFICATE OF TESTS SHALL NOT BE REPRODUCED EXCEPT IN FULL.

ALL TESTING HAS BEEN PERFORMED USING THE CURRENT REVISION OF THE TESTING SPECIFICATIONS.

RECORDING OF FALSE, FICTITIOUS OR FRAUDULENT STATEMENTS OR ENTRIES ON THIS DOCUMENT MAY BE PUNISHED AS A FELONY UNDER FED STATUTES TITLE 18 CHAPTER 47.

THE MATERIAL WAS NOT EXPOSED TO MERCURY OR ANY METAL ALLOY THAT IS LIQUID AT AMBIENT TEMPERATURE DURING PROCESSING OR WHILE IN OUR POSSESSION.

NO WELD OR WELD REPAIR WAS PERFORMED ON THIS MATERIAL.

THE RESULTS REPORTED RELATE ONLY TO THE ITEMS TESTED.

SOURCE INFORMATION
MELT SOURCE: CANTON CAST ROLL MELT COUNTRY: U.S.A HOT ROLL SOURCE: LORAIN 9/10, U.S.A
MELT METHOD: EF BLOOM RED. RATIO: 1177.6

END OF DATA CC END OF DATA
WITH SHIPMENT 1 COPY PRINTED AT SHIPPING AREA
FAX SHIP TO 1 COPY ATTENTION EDWARD ZAPOLA 1-814-532-5684
FILE 1 COPY

G. KRUTH
DIRECTOR QUALITY ASSURANCE

BY DEBORAH STOKES

MT Kruth

COMMERCIAL PLATING COMPANY

TC-4500 XRF ST

Fri Sep 19 03:48:24 1997

COMMERCIAL PLATING CERTIFICATION AND TEST RESULTS

This is to certify that the order described below was plated to comply with the agreed upon requirements of the requested specification.

DATE: 01/18/14

CUSTOMER: MAC FASTENERS

PART NUMBER: AN4-14A

DESCRIPTION: BOLT

ORDER NUMBER: 94031

LOT NUMBER: 68538

TOTAL WEIGHT: 2972 LBS

PIECES PLATE TO GAUGE: Y

SPECIFICATION: SAE AMS QQ-P-416C, TYPE II, CLASS 2

REQUIREMENTS: 0.0003 CAD. MIN. AND YELLOW CHROMATE

AUTHORIZED SIGNATURE:

TITLE: QUALITY CONTROL MANAGER



OPZH84 0

110000 02/05/14

AN4-14A

TOTAL O/O: 1647 WHSE ONHAND: 1236
 MINIMUM: 20000 MAXIMUM: 40000
 MIAMI BACKORDERS: 1647

02/04/14 007093 ENSTROM HELI 77303	300	EA 02/05/14 8X06T1 SCHD (OEM)
*02/04/14 011009 AERO PARTNER 10035	50	EA 02/05/14 8WZJA0 SCHD (DISTRIB)
12/11/13 011245 PERFECTA P252098	75	EA 03/10/14 8TZ704 SCHD (OEM)
*08/07/13 022907 AVIO INTERIO OAL3004649	473	EA 03/18/14 8MVXR2 SCHD (OEM)
*08/07/13 022907 AVIO INTERIO OAL3004981	591	EA 03/18/14 8MVWN4 (OEM)
*01/15/14 004896 PATTONAIR B195283	128	EA 03/24/14 8W2RF5 (DISTRIB)

REM STK XFER 187386 02/06/09 140 022633 B/E AEROSPACE 310
 REM STK XFER 282676 12/27/13 169 021090 PFW AEROSPACE GMBH 470

Warehouse 2: Parts Falling below a 6 Month Trend Quantity

Part No.	Description	Quantity	DOM
AN4-14A	BOLT	11,076	ACS

470 TO WH 169 (X)

18 TO WH 57 (X)

7 500 TO WH 70 (X)

300 TO WH 102 (X)

400 TO WH 284 (X)

BALANCE TO WHSE 2 & 98

MACFASTENERS, INC.

1110 Enterprise Street

Ottawa, KS 66067

Phone: 785-242-8812

Fax: 785-242-4616

Packing List**Bill B/E AEROSPACE CONSUMABLES MGMT****To: 10000 NW 15TH TERRACE****MIAMI, FL 33172****Ship B/E AEROSPACE CONSUMABLES MGMT****To: 9835 NW 14th Street****Miami, FL 33172****United States****Shipment No: 62095****Shipment Date: 01/23/14****Ship Via: United Parcel Service****Order Number: 48480****Order Date: 07/22/13****Customer Code: BE AEROSPACE****Phone: (305) 925-2600****PO Number: 0PZH84****Terms: Net 30 Days****LOT #68538**

<u>Item</u>	<u>Quantity</u>				<u>Unit</u>	<u>Description</u>	<u>Job Number</u>
	<u>Open</u>	<u>Shipped</u>	<u>Back Ord</u>	<u>Canceled</u>			
1	100,000	110,000	0		M	AN4-14A Bolt, machine— Aircraft	68538 ✓

SIKORSKY
3534
DOA
MAY 01 2014

5/1/14

MAC FASTENERS, INC.
1110 ENTERPRISE
OTTAWA, KANSAS 66067

**CERTIFICATE OF CONFORMANCE
AND
MANUFACTURER'S AFFIDAVIT**

CUSTOMER: B/E AEROSPACE

PO: 0PZH84

PART NUMBER: AN4-14A ✓

REV: 2

LOT NUMBER: 68538 ✓

MANUFACTURED QUANTITY: 110,000

MILL HEAT NUMBER: 8193290 ✓

COUNTRY OF ORIGIN: UNITED STATES OF AMERICA

DFARS 252.225.7009 Compliant

SIKORSKY
3534
DOR
MAY 01 2014

5/1/14

MERCURY FREE CERTIFICATION

MacFasteners Inc. certifies that the parts referenced in the above lot number do not contain Mercury or Mercury compounds, and were manufactured in a Mercury free environment.

We certify that the parts furnished against the above referenced purchase order were manufactured by MAC FASTENERS, INC. within the United States, and were processed in accordance with all applicable drawings and specifications.

Objective evidence of compliance is on file, subject to examination upon request.

DATE: 01/22/14


QUALITY ASSURANCE REPRESENTATIVE

MacFasteners, Inc. is an AS9100C Registered Company- SAI GLOBAL - 0058029

MAC FASTENERS, INC.
1110 EAST ENTERPRISE
OTTAWA, KS 66067

CHEMICAL & PHYSICAL TEST REPORT

CUSTOMER B/E AEROSPACE	PO NUMBER 0PZH84	MFG QUANTITY 110,000	DATE 01/22/14
PART NUMBER AN4-14A	REV 2	LOT NO 68538	PROCUREMENT SPEC NASM6812

MATERIAL TYPE 8740				MATERIAL SPECIFICATION MIL-S-6049/AMS6322				MILL HEAT NUMBER 8193290			SUPPLIER JOHNSTOWN		
C .40	SI .24	Mn .77	P .010	S .010	Cu .10	NI .52	Cr .58	Mo .26	V .002	B	Fe	Al .023	Ti
	Co	N .0060	BI	Pb	Mg	Zn		Nb	Sn 005			Other	

MECHANICAL TEST RESULTS - TESTING PER NASM1312

ULTIMATE TENSILE STRENGTH POUNDS	
5,770	
5,710	
5,720	
5,730	
5,750	
MIN. REQ.	4,080

DOUBLE SHEAR STRENGTH POUNDS / PSI	
8,180	
8,130	
8,140	
8,160	
8,190	
MIN. REQ.	7,360

HARDNESS	
ROCKWELL "C" SCALE	
REQ.	26 - 32 HRC
SAMPLE SIZE	5
ACTUAL RESULTS	
28 - 30 HRC	

NDT/ ADDITIONAL TESTS	
Magnetic Particle Inspection per ASTM E1444	<input checked="" type="checkbox"/>
Liquid Penetrant Inspection per ASTM E1417	<input type="checkbox"/>
Recess Torque Test	<input type="checkbox"/>
Head Marking	<input checked="" type="checkbox"/>
Magnetic Permeability ASTM A342 less than 2.0	<input type="checkbox"/>

METALLURGICAL EXAMINATION			
Discontinuities	<input checked="" type="checkbox"/>	Carb/Decarb	<input checked="" type="checkbox"/>
Grain Flow	<input checked="" type="checkbox"/>	Microstructure	<input checked="" type="checkbox"/>
Grain Size	<input checked="" type="checkbox"/>	Appearance	<input checked="" type="checkbox"/>
Thread Inspection System <input type="checkbox"/> System <input checked="" type="checkbox"/> System <input type="checkbox"/> FED-STD-H28/20 - ASME B1.3 21 22 23			

TEST CERTIFICATION

WE CERTIFY THAT THE PART NUMBER, LOT NUMBER, AND SAMPLES REFERENCED ABOVE HAVE BEEN TESTED IN ACCORDANCE WITH THE APPLICABLE SPECIFICATION FOR THE TESTS REPORTED HEREIN. THIS CERTIFICATION SHALL NOT BE RE-PRODUCED, EXCEPT IN FULL, WITHOUT THE APPROVAL OF MAC FASTENERS, INC.


Quality Assurance Representative

AS9100C REGISTERED
SAI GLOBAL - 0058029

MAC FASTENERS, INC.
1110 ENTERPRISE
OTTAWA, KANSAS 66067

HEAT TREAT CERTIFICATION

CUSTOMER: B/E AEROSPACE

DATE: 01/22/14

PO NUMBER: 0PZH84

MANUFACTURED QUANTITY: 110,000

PROCESSOR:

PAULO PRODUCTS KCMO - NADCAP ID 4679

LOT NUMBER: 68538 ✓

MATERIAL: TYPE 8740

PART NUMBER: AN4-14A ✓

REVISION: 2

REQUIRED HARDNESS: 26 - 32 HRC

SAMPLE SIZE: 5

HARDNESS: 28 - 30 HRC

HEAT TREAT SPECIFICATION AS APPLICABLE: MIL-H-6875/AMS-H-6875/AMS2759/AMS5853/PS-1001 ✓

Notes:

The fasteners referenced in this report have been processed, inspected and certified by the Heat Treat Contractor in accordance with all applicable drawings and specifications. Heat Treatment has been verified in accordance with procurement specification and part drawing, by metallurgical and mechanical testing as applicable. Evidence of compliance as well as certification from the Heat Treat Contractor is on file and subject to examination upon request.


QUALITY ASSURANCE REPRESENTATIVE

MacFasteners, Inc. is an AS9100C Registered Company - SAI GLOBAL - 0058029

SIKORSKY
3534
DOR
May 6 - 2007

5/6/14
SAI



Johnstown Wire Technologies

124 Laurel Ave,
Johnstown, PA 15906

Phone: 814-532-5680
Fax: 814-532-5684

WORK ORDER
800310

TEST REPORT
LOT NUMBER
K-8193290
SALES ORDER / RLS
002318 / 1

SOLD TO

Mac Fasteners, Inc.
C/O TD Logistics Inc.
14505 W 100th Street
Lenexa, KS 66215
USA



CUSTOMER P.O. 50516	CUSTOMER PART 8740- .2465	QUANTITY 39,644 LBS	COILS 20	LADING NO 00119854	SHIPMENT DATE 09/20/2013
SPECIFICATION / MacFast-87246 AMS2301; AMS6322; AMS-S-6049A; MIL-S-6049A 8740 DFARS TS 95000 PSI Max Defense Federal Acquisition Regulation Supplement Silicon Killed Fine Grain Aircraft Quality/Cold Heading Quality Drawn From Annealed Rod Spheroidize Annealed In Process Heavy Phos & Light Lube Ctd Size: .2465 +.0005 -.0005					
CERTIFICATION REQUIREMENTS					
Chemical					
C .40	Mn .77	P .010	S .010	Si .24	Al .023
Cr .58	Mo .26	Cu .10	V .002	Ni .52	
Ca .000	Ti ???????	N .0060	Sn .005		
Physical					
AMS 2301 0000	J1 56	J10 40	J11 38	J12 36	J2 55
					J3 55
					J5 53
					J4 54
					J6 52
					J7 50
					J8 46
					J9 43
MacroClean E-381 111					
Mechanical					
TEST	UNITS	HIGH	LOW	AVERAGE	
Tensile Str	Lbs/Sqin	86000	84000	85000	
RA Per Cent	Percent	73.8	67.2	70.3	
Decarb FFD	Inches	.000	.000	.000	
Surface def. depth	Inches	.001	.001	.001	
Rod / Melt Source					
Rod Source Republic	Melt Source Republic	Country of Origin USA	Nafta Yes		
End of Certification					

I certify that the results are a true and correct copy of the records prepared and maintained by JOHNSTOWN WIRE TECHNOLOGIES in compliance with the requirements of the cited specification. Chemistry is as reported by the rod / bar supplier and is not in JWT A2LA accreditation. This test report cannot be reproduced or distributed except in full without the written permission of JOHNSTOWN WIRE TECHNOLOGIES. The test results certified herein relate only to the items tested.

Daniel J. Malik
Daniel J. Malik Director of Quality Assurance

SKETCH
5534
DOR
MAY 01 2014



CERTIFICATE OF TESTS

1807 EAST 28TH ST.
PHOENIX: 330-438-3580LORAIN, OH 44055
FAX: 330-438-5695

REPUBLIC STEEL

6/24/2013
2:46:00 PM
PAGE 1 OF 2PURCHASE ORD: 84084
PART NUMBER: FXT40AA-.375
ORDER NUMBER: 1547434 - 01
HEAT: 8193290PURCHASE ORDER DATE: 3/4/2013
ACCOUNT NUMBER: 5672-1921-01
SCHEDULE: 4927-93
REVISION: 1

CHARGE ADDRESS

JOHNSTOWN WIRE TECHNOLOGIES
124 LAUREL AVE
JOHNSTOWN, PA 15906

SHIP TO

JOHNSTOWN WIRE TECHNOLOGIES
EDWARD ZAPOLA
C/O C & BL RAILROAD
TRACK 629
JOHNSTOWN, PA 15901

MATERIAL DESCRIPTION

HOT ROLLED STEEL COILS ALLOY AMS 2301K JOHNSTOWN WIRE SPEC RW-100 REVISION DTD 04/21/04 EXC PARA 10.3 AMS 6322N EXC HARD JOHNSTOWN WIRE SPEC RW-005 REVISION DTD 12/31/00 EXC SURFACE DEFECTS JOHNSTOWN WIRE SPEC PART NO. FXT40AA REVISION DTD 12/31/00 MIL 8 6049A & AND 1 COND B-1 EXC MARK & UT WAIVED EF-AISI-8740-H FINE GRAIN VACUUM DEGAUSS AIRCRAFT QUALITY FIXED PRACTICE QUALITY RESTRICTED CHEMISTRY RESTRICTED MAX INCIDENTAL ELEMENTS
SIZE: RDS .3750 DIAM X COIL
RDS 9.5250MM DIAM X COIL

LADLE CHEMISTRY %

C	MN	P	S	SI	CU	NI	CR
0.40	0.77	0.010	0.010	0.24	0.10	0.52	0.58
V	MO	SN	AL	B	CB	N	
0.002	0.26	0.005	0.023	0.0000	0.000	0.0060	

CALCULATED TESTS

REDUCTION RATIO 1,177.6 TO 1

AUSTENITIC GRAIN SIZE 5 OR FINER BASED ON A TOTAL ALUMINUM CONTENT EQUAL TO OR GREATER THAN .020% PER ASTM A29.

SEMI - FINISHED RESULTS

JOMINY HARDNESS TEST

SAE J406/ASTM A255

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	18	20	22	24	26	28	30	32
56	55	55	54	53	52	50	46	43	40	38	36	36	34	33	32	31	30	30	29	29	29	28	28

MACRO ETCH TEST

ASTM E381/MIL STD 430

ETCHANT: HCL TEMPERATURE: 170

AVG	S	R	C
1	1	1	1

MAGNETIC PARTICLE TEST

AMS 2301 AMS2304 AMS2300

IND	AVG	IND	AVG
FREQ	FREQ	SEV	SEV
PCE 03	0	0	0

FINISHED SIZE RESULTS

DECARBURIZATION TEST

SAE J419/ASTM E1077/JIS G0558

ETCHANT - NITAL

MAGNIFICATION - 100X

SPIKE	COMPLETE	TOTAL
INCHES	INCHES	DEPTH
PCE 6581	0.002	0
		0.002

G. KRUTH
DIRECTOR QUALITY ASSURANCE

BY DEBORAH STOKES

SKORSKY
3534
DOR

MAY 01 2014



CERTIFICATE OF TESTS

1907 EAST 28TH ST.
PHONE: 330-438-5580

REPUBLIC STEEL

LORAIN, OH 44055
FAX: 330-438-5695

6/24/2013
2:46:00 PM
PAGE 2 OF 2

PURCHASE ORD: 84084
PART NUMBER: FXT40AA-.375
ORDER NUMBER: 1547434 - 01
HEAT: 8193290

PURCHASE ORDER DATE: 3/4/2013
ACCOUNT NUMBER: 5672-1921-01
SCHEDULE: 4927-93
REVISION: 1

CAPABLE OF SEAM DEPTH 1/4 MAX DIAMETER NOT LESS THAN .005 MAX

CHEMICAL ANALYSIS CONFORMS TO APPLICABLE SPECS: ASTM E415, LBL10129, LBL10130, ASTM E1019, LBL10158, LBL10114, AND ASTM E1085, LBL10184, LBL10188.

REPUBLIC STEEL HEREBY CERTIFIES THAT THE MATERIAL LISTED HEREIN HAS BEEN INSPECTED AND TESTED IN

ACCORDANCE WITH THE METHODS PRESCRIBED IN THE GOVERNING SPECIFICATIONS AND BASED UPON THE RESULTS OF SUCH INSPECTION AND TESTING HAS BEEN APPROVED FOR CONFORMANCE TO THE SPECIFICATIONS.

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NO WELD OR WELD REPAIR WAS PERFORMED ON THIS MATERIAL.

THE RESULTS REPORTED RELATE ONLY TO THE ITEMS TESTED.

SOURCE INFORMATION
MELT SOURCE: CANTON CAST ROLL MELT COUNTRY: U.S.A HOT ROLL SOURCE: LORAIN 9/10, U.S.A
MELT METHOD: BF BLOOM RED. RATIO: 1177.6

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FAX SHIP TO 1 COPY ATTENTION EDWARD ZAPOLA 1-814-532-5684
FILE 1 COPY

G. KRUTH
DIRECTOR QUALITY ASSURANCE

BY DEBORAH STOKES

MT Kruth

5/1/14
SIKORSKY
3534
DOR
MAY 01 2014

COMMERCIAL PLATING COMPANY

TC-4500 XRF ST

Fri Sep 19 03:48:24 1997

COMMERCIAL PLATING CERTIFICATION AND TEST RESULTS

This is to certify that the order described below was plated to comply with the agreed upon requirements of the requested specification.

DATE: 01/18/14

CUSTOMER: MAC FASTENERS

PART NUMBER: AN4-14A

DESCRIPTION: BOLT

ORDER NUMBER: 94031

LOT NUMBER: 68538

TOTAL WEIGHT: 2972 LBS

PIECES PLATE TO GAUGE: Y

SPECIFICATION: SAE AMS QQ-P-416C, TYPE II, CLASS 2

REQUIREMENTS: 0.0003 CAD. MIN. AND YELLOW CHROMATE

AUTHORIZED SIGNATURE:

TITLE: QUALITY CONTROL MANAGER

5/1/14
SKORSKY
3534
DOR
MAY 01 2014

OPZH84 0

110000 02/05/14

AN4-14A

TOTAL O/O: 1647 WHSE ONHAND: 1236
 MINIMUM: 20000 MAXIMUM: 40000
 MIAMI BACKORDERS: 1647

02/04/14 007093 ENSTROM HELI 77303	300	EA 02/05/14 8X06T1 SCHD (OEM)
*02/04/14 011009 AERO PARTNER 10035	50	EA 02/05/14 8WZJAO SCHD (DISTRIB
12/11/13 011245 PERFECTA P252098	75	EA 03/10/14 8T2704 SCHD (OEM)
*08/07/13 022907 AVIO INTERIO OA13004649	473	EA 03/18/14 8MVXR2 SCHD (OEM)
*08/07/13 022907 AVIO INTERIO OA13004981	591	EA 03/18/14 8MVVN4 (OEM)
*01/15/14 004896 PATTONAIR B195283	188	EA 03/24/14 8W2RF5 (DISTRIB

REM STK XFER 187386 02/06/09 140 022633 B/E AEROSPACE 310
 REM STK XFER 282676 12/27/13 169 021090 PFW AEROSPACE GMBH 470

Warehouse 2: Parts Falling below a 6 Month Trend Quantity

Part No.	Description	Quantity	UOM
AN4-14A	BOLT	11,076	pcs

470 TO WH 169 (X)

18 TO WH 57 (X)

7 500 TO WH 70 (X)

300 TO WH 102 (X)

400 TO WH 284 (X)

BALANCE TO WHSE 2 x 98

Sikorsky Inspection Checklist

Part# AN4-14A
Control# 2014 B03399
Date 5/1/14

Key Items

N/A = Not applicable

✓ = In pack

M&P Index - NA
Standard Parts Index - ✓
Approved Source List - NA
Correct Part Rev. - ✓
OP Sheet - NA
SSQS PO Report - ✓
Customer "Sub" - Sik
Inspection Codes Update - ✓
Mylar - NA

5/1/14
✓

Sikorsky SSQS PO Report**PO# 5500120791**

PO LINE NO.	QTY	SUPPLIER CODE	PART NO	DWG REV	P/L REV
00005	96	065774	AN4-14A	NA	
O/S Rev	FSP	EPATS Rev	FAI	GSI	Serial Letter/Number Prefix
	N		N	N	/

Index Dates

Seq No	M&P Index Date	Appv Src	Index Date	Std Part	Index Date
1					10/01/2011

This data is subject to the export control of either the ITAR or EAR and cannot be exported without the prior authorization of the U.S. Government.

5/1/14
6/1/14

SIKORSKY STANDARD PARTS INDEX

Oct. 2011

Page 4

PART NUMBER	DOCUMENT	REV	NOMENCLATURE	TYPE	CATEGORY	NOTES
62070		25	INSERT, SPEC THD (SPS)	FSNR	INSERTS	Q
78322		-	TURN BUTTON FASTENER	FSNR	QTR TURN FSTNR	V
78403		-	TURN BUTTON EYELET	FSNR	QTR TURN FSTNR	V
78505		-	TURN BUTTON WASHER	FSNR	QTR TURN FSTNR	V
79698		7	INSERT, SPEC THD, USE W/ASYM THD	FSNR	INSERTS	Q
A-A-52506		C	CLAMPS, HOSE	MISC	CLAMPS	R
A-A-55487		-	PIN LOCK (HITCH PIN)	FSNR	PINS	
AIR786		A	ELASTOMER COMPATIBILITY FOR O-RINGS & SEALANT	PLUM	DESIGN DATA	
AIR797		E	HOSE CHARACTERISTICS & SELECTION CHART	PLUM	DESIGN DATA	
AN3-20	NASM3-20	2	BOLT, MACHINE, 125 KSI Ftu	FSNR	BOLTS	R M
AN21-37	NASM21-37	-	BOLT, CLEVIS, 125 KSI Ftu	FSNR	BOLTS	R M
AN42-49	NASM42-49	1	BOLT, EYE, 125 KSI Ftu	FSNR	BOLTS	R M
AN100		3	THIMBLE, WIRE CABLE	MISC	CABLE/CORD ASSY	I
AN116		2	SHACKLE, ANCHOR, FORGED CARBON STEEL SCREW PIN	MISC	MISCELLANEOUS	I
AN173-186		7	BOLT, MACHINE, CLOSE TOL, 125 KSI Ftu	FSNR	BOLTS	
AN229	NASM229	1	FASTENER, INTERLOCKING SLIDE	FSNR	MISCELLANEOUS	R M
AN231		4	GROMMET - DRAINAGE, PLASTIC	MISC	BOOTS & GROMMETS	
AN256	NASM256	2	NUT - SELF LOCKING, PLATE, RIGHT ANGLE, 250 DEG F	FSNR	NUT	R M
AN310	NASM310	-	NUT, PLAIN, CASTELLATED	FSNR	NUTS	M
AN315	NASM315	2	NUT, PLAIN, HEX	FSNR	NUTS	R M
AN316	NASM316	1	NUT, JAM, HEX	FSNR	NUTS	R M
AN320	NASM320	2	NUT, PLAIN, CASTELLATED, SHEAR	FSNR	NUTS	R M
AN365		C	NUT, SELF-LOCKING, 250 DEG F (MS20365)	FSNR	NUT	R Z
AN386	NASM386	-	PIN, THREADED TAPER	FSNR	PINS	M
AN415		3	PIN, LOCK (HITCH PIN) (AA55487)	FSNR	PINS	Z
AN490	AS49011	-	ROD END, THREADED	MISC	CNTRL COMPONENTS	M
AN504		6	SCREW, TAPPING, THD CUTTING, ROUND HD	FSNR	SCREWS	I
AN505		7	SCREW, MACH, FLAT HD, 82 DEG COARSE THD	FSNR	SCREWS	I
AN508		A	SCREW, ROUND HEAD MACHINE, (FOR ELECTRICAL USE)	FSNR	SCREW	R I
AN509		C	SCREW-MACHINE, FLAT HEAD, 100 DEG., STRUCTURAL (MS24694)	FSNR	SCREW	R Z
AN520		4	SCREW, MACHINE, ROUND HEAD, FINE THREAD (MS35207, MS35215, MS35219, MS51958)	FSNR	SCREW	R Z

SAE AS9102 Revision A

Functional Testing Sheet 1 of 1

Sheet 1 of 1

[illegible]

Form 3: Characteristic Accountability, Verification and Compatibility Evaluation

Sheet 1 of 1

1. Part Number				2. Part Name		3. Serial Number		4. FAI Report	
AN4-14A				Bolt - Machine, Aircraft		N/A		Control # 2014B03399	
Characteristic Accountability				Inspection / Test Results					
5. Char No.	6. Reference Location	7. Characteristic Designator	8. Requirement	9. Results	10. Designed Tooling	11. Non-Conformance Number	14a. FAI Inspection Measuring Equipment	14b. Production Inspection Measuring Equipment	14c. FAI Inspector Identification
1	Sheet 1	Minor	Marking	0100 X	N/A	N/A	Visual	Visual	130
2	Sheet 1	Minor	Visual	Conforms	N/A	N/A	Visual	Visual	130
3	Sheet 1	Minor	Residual Mag Check	< 1 Gauss	N/A	N/A	Mag. Ind.	Mag. Ind.	130
4	Sheet 1	Minor	T Functional Dia 1/4-28 UNF-3A	0.2252	N/A	N/A	Johnson Gage	Johnson Gage	130
5	Sheet 1	Minor	T Pitch Dia .2243 - .2268	0.2254	N/A	N/A	Johnson Gage	Johnson Gage	130
6	Sheet 1	Minor	Major Dia .2435 - .2500	0.2475	N/A	N/A	Micrometer	Micrometer	130
7	Sheet 1	Minor	A .246 - .249	0.248	N/A	N/A	Micrometer	Micrometer	130
8	Sheet 1	Minor	B .428 - .440	0.437	N/A	N/A	Caliper	Caliper	130
9	Sheet 1	Minor	D .140 - .172	0.157	N/A	N/A	Caliper	Caliper	130
10	Sheet 1	Minor	F .015 - .047	0.030	N/A	N/A	Optical Comparator	Optical Comparator	130
11	Sheet 1	Minor	H .398 Min	0.4	N/A	N/A	Optical Comparator	Optical Comparator	130
12	Sheet 1	Minor	J .076 +.010/- .000	N/A	N/A	N/A	N/A	N/A	130
13	Sheet 1	Minor	K .046 +.010/- .000	N/A	N/A	N/A	N/A	N/A	130
14	Sheet 1	Minor	Length 1-17/32 +1/32, -1/64 (1.531)	1.545	N/A	N/A	Caliper	Caliper	130
15	Sheet 1	Minor	Grip 1-1/16 ± 1/64 (1.0625)	1.070	N/A	N/A	Optical Comparator	Optical Comparator	130
16	Sheet 1	Minor	.010 ± .005 Radius	.010 R	N/A	N/A	Optical Comparator	Optical Comparator	130
17	Sheet 1	Minor	Grip + E +/- 1/64	N/A	N/A	N/A	N/A	N/A	130
18	Sheet 1	Minor	Hole Centerline w/in .010	N/A	N/A	N/A	N/A	N/A	130
19	Sheet 1	Minor	Hole normal to CL w/in 2 Deg	N/A	N/A	N/A	N/A	N/A	130
20	Sheet 1	Minor	30 ± 5 Degrees	30°	N/A	N/A	Optical Comparator	Optical Comparator	130
21	Sheet 1	Minor	15 ± 5 Degrees	15° 15'	N/A	N/A	Optical Comparator	Optical Comparator	130
22	Sheet 1	Minor	D/2	N/A	N/A	N/A	N/A	N/A	130
23	Sheet 1	Minor	.016 ± .010	0.013	N/A	N/A	Optical Comparator	Optical Comparator	130
24	Sheet 2	Minor	Marking height or depth	0.014	N/A	N/A	Mold/Optical Comp	Mold/Optical Comp	130
25	Sheet 1	Minor	Material: 8740 Non-Corrosive Steel per AMS6322	Johnstown Wire Heat# K-8193290	N/A	N/A	Cert	Cert	130
26	Sheet 1	Minor	Finish: Cad Plate per QQ-P-416 superseded by AMS-QQ-P-416	Commercial Plating Lot# 68538	N/A	N/A	Cert	Cert	130
27	Sheet 1	Minor	Proc. Spec: per NASM 6812	Mac Fasteners Lot# 68538	N/A	N/A	Cert	Cert	130
28	Sheet 2	Minor	Free from burrs/slivers	Conforms	N/A	N/A	Visual	Visual	130
29	Sheet 3	Minor	Dims in inches. Tol. U.O.S.	Noted	N/A	N/A	Informational	Informational	130
30	Sheet 3	Minor	Ultimate Tensile Strength:4080	Mac Fasteners Lot# 68538	N/A	N/A	Cert	Cert	130
31	Sheet 3	Minor	Yield Strength:3130	N/A	N/A	N/A	N/A	N/A	130
32	Sheet 3	Minor	Single Shear:3680	Mac Fasteners Lot# 68538	N/A	N/A	Cert	Cert	130
33	Sheet 1	Minor	45° ± 5°	45°	N/A	N/A	Optical Comparator	Optical Comparator	130
34	Sheet 1	Minor	Visual for FOD	Compliant	N/A	N/A	Visual	Visual	130

The signature indicates that all characteristics are accounted for, meet drawing requirements or are properly documented for disposition.

12. Prepared By David M. Denis

13. Date

5/1/2014

SAE AS9102 Revision A

SKORSKY

3534

DOR

MAY 01 2014



33534
BPP
MAY 01 2014

PART# AN4-14A
Ctrl# 201HB03399



B/E Aerospace, Inc.

Page: 1 of 1

CONSUMABLES MANAGEMENT

P.O. Box 025263, Miami, FL 33102-5263 • Tel: 305.925.2600 • Fax: 305.507.7191
Plant Location: 10000 N.W. 15th Terrace, Miami, FL 33172 • SITA: MIAMMCR
www.beconsumables.com

Shipped From: 10000 NW 15 TERRACE, MIAMI, FL 33172


Material Certification

The items set forth on the purchase order referred to below have been visually inspected and the dimensions thereof have been measured by us, and based on the aforesaid, as well as the representation made to us by the manufacturers of the items subject of such purchase order, we hereby certify that such items are in conformity with all current governmental and manufacturer's requirements, specifications, drawings, and conform to the purchase order requirements. Said items are in new condition and have not been obtained from any U.S. Government or Military source and are traceable to B/E Aerospace, Inc.

FIRM: DART AEROSPACE LTD

PURCHASE ORDER#: PO24431

LINE#	QUANTITY	U/M	PART-NUMBER	CUST REF#	LOT-NUMBER	MANUFACTURER	CCODE	MFR DATE	EXP DATE
8	75	EA	NAS388-6-8P		M8874	PILGRIM SCREW (AZ)	1GP79		


Jason Lewis
Vice President of Quality

06/03/14

PILGRIM

Screw Corporation

PACKING LIST

ARIZONA - 480-917-2500

SHIPPED FROM
2875 WEST FRYE RD
CHANDLER, AZ 85224

RHODE ISLAND - 401-274-4090

6/2/2011



PAC124087

BE
BILL TO: B/E AEROSPACE
CONSUMABLES MANAGEMENT
MIAMI FL 33102-5263
P.O. BOX 025263

SHIP TO: B/E AEROSPACE
CONSUMABLES MANAGEMENT
9835 NW 14TH STREET
MIAMI, FL 33172

OUR ORDER #	TERMS	FREIGHT SHIP VIA	SHIPPING DATE
ORD104537	N-30*DNI*033101490	C FedEx Ground	6/2/2011

CUSTOMER PO #:
0ZJ868

QTY	U/M	PART #	DRAWING #
 250	EA	 NAS388-6-8P 6-32 X 1/2 PH OVL STL/NI OR SOONER	NAS388 Revision: NEW

LOT#:

A26727 QTY: 39.00

M8874 QTY: 211.00 pc#253

1 CTNS, TOTAL WT. 1.00 LBS WITH 0 ON BACKORDER

MFR C OF C

CHEM AND PHYS

MATERIAL AND PROCESS CERTS

QC: A, A.3, B, C, E, H, P, U, V

LATEST REV

SHIPPING INSTRUCTIONS:

****NO OVERSHIPMENTS****

IF UNDER 150 LBS SHIP FEDEX GROUND ACCT# 0331-0149-0 MARK:

COLLECT

IF OVER 150 LBS, SHIP WATKINS MOTOR LINE ACCT #081757.

*****DO NOT INSURE OR DECLARE A VALUE FOR THIS SHIPMENT*****

CERTIFICATE OF COMPLIANCE

We hereby certify that all items delivered on this invoice comply with all applicable drawing, specification, and purchase order requirements. Evidence of such is on file for review for a minimum of 10 years. All products manufactured by Pilgrim Screw are of domestic origin and have not come in contact with mercury while in our possession. Also all special processes were performed by approved sources at the time of manufacture. Shortage claims must be made within (5) days after receipt of the goods. Quality claims must be made within (30) days after receipt of the goods. Returns will not be accepted without a 'Return Material Authorization' number. All goods returned must have the freight prepaid.

MADE IN THE USA

Page # 1

Lee Ash QC Manager Authorized Rep.

PILGRIM

Screw Corporation

PACKING LIST

ARIZONA - 480-917-2500

SHIPPED FROM
2875 WEST FRYE RD
CHANDLER, AZ 85224

RHODE ISLAND - 401-274-4090

6/2/2011



PAC124087

BE
BILL TO: B/E AEROSPACE
CONSUMABLES MANAGEMENT
MIAMI FL 33102-5263
P.O. BOX 025263

SHIP TO: B/E AEROSPACE
CONSUMABLES MANAGEMENT
9835 NW 14TH STREET
MIAMI, FL 33172

OUR ORDER #	TERMS	FREIGHT SHIP VIA	SHIPPING DATE
ORD104537	N-30*DNI*033101490	C FedEx Ground	6/2/2011
CUSTOMER PO #:			
	0ZJ868		

QTY	U/M	PART #	DRAWING #
-----	-----	--------	-----------

Schedule B#: 731815
ECCN #: 9A991d "NLR"

SHIPPING INSTRUCTIONS: LABEL ON OUTSIDE OF BOX

HONEYWELL SOURCE ACCEPTED:

STAMP IMPRESSION

DATE:

6/2/2011

****BOXES MUST NOT EXCEED 40 LBS EACH****

CERTIFICATE OF COMPLIANCE

We hereby certify that all items delivered on this invoice comply with all applicable drawing, specification, and purchase order requirements. Evidence of such is on file for review for a minimum of 10 years. All products manufactured by Pilgrim Screw are of domestic origin and have not come in contact with mercury while in our possession. Also all special processes were performed by approved sources at the time of manufacture. Shortage claims must be made within (5) days after receipt of the goods. Quality claims must be made within (30) days after receipt of the goods. Returns will not be accepted without a 'Return Material Authorization' number. All goods returned must have the freight prepaid.

MADE IN THE USA

Page # 2

Lee Ash QC Manager Authorized Rep.

Robert

CERTIFICATE OF TEST
THE ATLANTIC WIRE COMPANY
BRANFORD, CONNECTICUT 06405

CUSTOMER
 ADDRESS
 ITEM
 DESCRIPTION

PILGRIM SCREW CORP.
 250 DEXTER STREET
 PROVIDENCE RI 02907

101012000535001

.120" (+-.002) PHOS & REACT
 LUBE SAFS AK OR SK C1018 ONLY
 CHD #2 ROD 2000# CONT CL ON
 CORR CERT/ASTM A108/A545/A580

OUR ORDER NO.
 081357
 CUSTOMER ORDER NO.
 20112

THIS IS TO CERTIFY THAT THIS MATERIAL WAS MADE TO SPECIFICATION
 AND THAT TO THE BEST OF OUR KNOWLEDGE AND BELIEF HAD CHEMICAL AND PHYSICAL PROPERTIES AS SHOWN BELOW:

QUANTITY	DATE SHIPPED	HEAT NO.	LOT NO.	TENSILE	ELONG.	RA.
13,440H	12/22/97	F47756	1771	61,822 62,530	23.9	84.0

ANALYSIS:

LOT NO.	C	Mn.	P.	S	SI	AL
1771	0.170	0.000	0.008	0.014	0.07	0.033

REMARKS:

12/21/97
 DATE

RCM
 CERTIFIED BY & TITLE



PILGRIM SCREW CORPORATION

120 Sprague Street, Providence, RI 02907



NEW METHOD (NI)
43 HAMMOND STREET
WORCESTER MA 01610

Item # 2504 Ref: PO# PL1412 Date 04/14/99
Lot/Job # Part # Net Weight Quantity
M8874 NAS388-06-08P 30 14340

[] Cadmium, QQ-P-416F Type , Class
[] Cadmium, AMS2400S
[X] Nickel, QQ-N-290A, Class 1, Grade G
[] Nickel, Best Commercial, thickness .0003 max. as measured on hd
[] Zinc, ASTM B633-85, Type , Fe/Zn
[] CHROME, QQ-C-320B(4) CLASS 2 TYPE II

Material: 8740[] 8630[] 4037[] 1018[X] []

Heat Treated? Yes[] No[X] Hardness: 26 HRC max

Special Instructions

QA Initials J. E. R

The certifying company shall maintain a record of each processing bath showing all additional chemicals or treatment solutions to the unit, results of all analysis performed, and quantity of parts plated for a period of not less than 1 year. Sampling for acceptance tests is 32 pieces for thickness and 4 pieces for adhesion tests without non-compliance (zero-based acceptance plan). Workmanship involves a 100% visual inspection for the appearance of a smooth uniform finish. Corrosion tests are applicable to specification.

Thickness Test Results

Accept. [✓] Reject [] Minimum: Spec. .0002 Read .00020 Average .00024

Adhesion Test Results

Accept. [✓] Reject [] Inspected by Bill Wolfe

Certification

To: QA Manager, Pilgrim Screw Corporation.

This lot has been processed, sampled, tested, and inspected in accordance with the contract and specification requirements listed above, and the plating and conversion coating complies with those contract and specification requirements. Process control data is on file and is available upon request.

Signed: Bill Wolfe

Title Foreman

Date 4-16-99



120 SPRAGUE STREET ☉ PROVIDENCE, RI 02907 ☉ (401) 274-4090 ☉ FAX (401) 861-9890
2875 WEST FRYE ROAD ☉ CHANDLER, AZ 85224 ☉ (480) 917-2500 ☉ FAX (480) 917-9979

www.pilgrimscrew.com

February 14, 2011

To Whom It May Concern:

Pilgrim Screw Corporation certifies that within the calendar year of 2011 more than 50% of our purchases of "specialty metals," as defined by DFARS 252.225-7009(a)(1)(2) used for the manufacture of fasteners, are or will be made from domestically melted "specialty metal" as defined in DFARS 252.225-7009(c)(3). Therefore, we consider the commercial fasteners produced by our company to be in compliance with DFARS 252.225-7009(c)(3), that is, "DFARS Compliant."

Respectfully,

Geoffrey Grove
President
Pilgrim Screw Corp.
geoffgrove@pilgrimscrew.com



B/E Aerospace, Inc.

Page: 1 of 1

CONSUMABLES MANAGEMENT

P.O. Box 025263, Miami, FL 33102-5263 • Tel: 305.925.2600 • Fax: 305.507.7191
Plant Location: 10000 N.W. 15th Terrace, Miami, FL 33172 • SITA: MIAMMCR
www.beconsumables.com

Shipped From: 10000 NW 15 TERRACE, MIAMI, FL 33172


Material Certification

The items set forth on the purchase order referred to below have been visually inspected and the dimensions thereof have been measured by us, and based on the aforesaid, as well as the representation made to us by the manufacturers of the items subject of such purchase order, we hereby certify that such items are in conformity with all current governmental and manufacturer's requirements, specifications, drawings, and conform to the purchase order requirements. Said items are in new condition and have not been obtained from any U.S. Government or Military source and are traceable to B/E Aerospace, Inc.

FIRM: DART AEROSPACE LTD

PURCHASE ORDER#: PO24431

LIN#	QUANTITY	U/M	PART-NUMBER	CUST REF#	LOT-NUMBER	MANUFACTURER	CCODE	CURE DATE	EXP DATE
11	300 EA		NAS1611-005						
			QTY: 275		KMCE18	INTERNATIONAL SEAL/S	1CN74	01/01/12	UNLIMITED
			QTY: 25		JKDE18 4Q10	SIMRIT FREUDENBERG,	KC3N2	11/16/10	UNLIMITED


Jason Lewis
Vice President of Quality

06/03/14

simrit®

INTERNATIONAL SEAL 

Page 1 Of 1

----- CERTIFICATE OF CONFORMANCE -----

TO: KAPCO
3120 EAST ENTERPRISE ST
BREA, CA 92821-6237

Cust. PO NO: 229695-00

Contract NO:

S/O Number: 06234247

Specification : NAS 1613 Rev 2

L#	Our Part Number/Customer P/N	Quantity	Batch	Cure
002	62AS568-005 E458 NAS1611-005	611.00	JKDE18 NAS1611-005 REV 11	4Q10

Test Description

Examination of Product (MIL-STD-413)

Fluid Immersion, Skydrol 500B4; 70 hrs @ 160F; ASTM D471:
Volume Change, %

Specific Gravity
ASTM D297

Hardness, Durometer M; Unsoaked Condition

Test Results

Requirements

Pass

3

0 To 8

1.2

1.18 To 1.22

82

75 To 85

THIS IS A COPY OF THE ORIGINAL
CERTIFICATION AS DELIVERED
TO KAPCO



This is to certify that the above parts were made in conformity with the specification listed, and that the above test results were obtained. This report shall not be reproduced, except in full, without the written approval of ISC-FNGP laboratory. The material furnished is free from Mercury contamination.

Signed:

Title : Quality Assurance Representative

Date : 11/16/10

KAPCO ICN

23 05 80

04/20/12

CUSTOMS INVOICE/PACKING SHEET



3206924 02

Cust#: 41513
SOLD TO: B/E AEROSPACE
CONSUMABLES MANAGEMENT

SHIP TO: B/E Aerospace Consumables Management
9835 NW 14TH ST
MIAMI, FL 33172

MIAMI, FL 33172

Pref. Routing Routine: SEE NOTES RE: WEIGHT

UPC VENDOR	INVOICE NO.	ON DOCK
000000		03/09/12
PROMISED	REQUEST	SHIPPED
03/19/12	03/19/12	
CUSTOMER P.O.		CUSTOMER RELEASE
0FWS12		0FWS12

CORRESPONDENCE TO:

B/E AEROSPACE
CONSUMABLES MANAGEMENT
10000 N.W. 15th Terrace

Miami, FL 33172

P.O. NUMBER	ITEM NO.	PART NUMBER	ICN No.	QTY	UOM	UNIT PRICE	TOTAL VALUE	COUNTRY OF ORIGIN	QUANTITY ORDERED	QUANTITY B.O.	QUANTITY SHIPPED
0FWS12	1	NAS1611-005		561.00	EA				561.00	0.00	561.00
		Desc: PACKING "11"									
		PCAT: S									
			292388	561.00		Cure: 1Q2012		US			
		MFR- Name: INTERNATIONAL SEAL - FNGP									
		Revision: 11									
		MFR- Batch: KMCE18									
		IT IS HEREBY CERTIFIED THAT THE ITEM IDENTIFIED HEREIN CONFORMS TO AN ESTABLISHED INDUSTRY, U.S. GOVERNMENT, OR COMMERCIAL STANDARD. PARTS ARE BEING SHIPPED BY KAPCO ON BEHALF OF BE AEROSPACE CONSUMABLES MANAGEMENT, UNDER LICENSING AGREEMENT.									
		S/L: UNLTD ARP5316									
		INSP BY: Norma Estrada 04/20/2012									

The merchandise listed has been produced in accordance with Fair Labor Standards Act of 1938 as amended. No claims allowed unless made within ten (10) days after receipts of Goods and in no case shall the liability assumed by us under the guarantees either expressed or implied, exceed the face value of the invoice for the merchandise in question.

These commodities, technology or software were exported from the United States in accordance with the Export Administration Regulations. Diversion contrary to U.S. Law is prohibited.

SHIPPED UNDER NLR HS#8803.30.0010 - ECCN: 9A991.D

COUNTRY OF ORIGIN: USA

TOTAL BOX VALUE:

PAGE 1

FOR CUSTOMS PURPOSES ONLY. DO NOT PAY FROM THIS DOCUMENT.



CERTIFICATE OF CONFORMANCE

WE HEREBY CERTIFY THAT THE PRODUCT SUPPLIED IS NEWLY MANUFACTURED, CONFORMS TO THE APPROVED DESIGN DATA, AND MEETS ALL REQUIREMENTS OF THE APPLICABLE PURCHASE ORDER. EVIDENCE OF CONFORMANCE IS ON FILE AND AVAILABLE FOR REVIEW UPON REQUEST.

PETE CURTI
CORPORATE VICE PRESIDENT OF QUALITY

Thank You For This Order
PACKING LIST

simrit®

INTERNATIONAL SEAL 

Page 1 Of 1

----- CERTIFICATE OF CONFORMANCE -----

TO: KAPCO
3120 EAST ENTERPRISE ST
BREA, CA 92821-6237

Cust. PO NO: 229695-00

Contract NO:
S/O Number: 06234247

Specification : NAS 1613 Rev 2

L#	Our Part Number/Customer P/N	Quantity	Batch	Cure
002	62AS568-005 E458 NAS1611-005	611.00	JKDE18 NAS1611-005 REV 11	4Q10

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Volume Change, %

Specific Gravity
ASTM D297

Hardness, Durometer M; Unsoaked Condition

Test Results Requirements

Pass

3

0 To 8

1.2

1.18 To 1.22

82

75 To 85

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TO KAPCO



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Signed:

Title : Quality Assurance Representative

Date : 11/16/10

KAPCO ICN

23 05 80

11/23/10

CUSTOMS INVOICE/PACKING SHEET



2639523 00

Cust#: 41513

SOLD TO: B/E AEROSPACE
CONSUMABLES MANAGEMENTSHIP TO: B/E Aerospace Consumables Management
Parc d'activite des Bethunes
12 Avenue du Fief

STE OUEN L'AUMONE, FR

Pref. Routing Routine: FEDX INTL ECON

UPC VENDOR	INVOICE NO.	ON DOCK
000000		10/12/10
PROMISED	REQUEST	SHIPPED
10/18/10	10/18/10	
CUSTOMER P.O.		CUSTOMER RELEASE
OSM439		OSM439

CORRESPONDENCE TO: B/E AEROSPACE
CONSUMABLES MANAGEMENT
10000 N.W. 15th Terrace

Miami, FL 33172

P.O. NUMBER	ITEM NO.	PART NUMBER	ICN No.	QTY	UOM	UNIT PRICE	TOTAL VALUE	COUNTRY OF ORIGIN	QUANTITY ORDERED	QUANTITY B.O.	QUANTITY SHIPPED
OSM439	1	NAS1611-005		200.00	EA				200.00	0.00	200.00
		Desc: PACKING "11"									
		PCAT: SQ									
		No License Required									
			230580-02	200.00		Cure: 4Q2010		US			
		MFR- Name: INTERNATIONAL SEAL - FNGP									
		Revision: 11									
		MFR- Batch: JKDE18									
		IT IS HEREBY CERTIFIED THAT THE ITEM IDENTIFIED HEREIN CONFORMS TO AN ESTABLISHED INDUSTRY, U.S. GOVERNMENT, OR COMMERCIAL STANDARD. PARTS ARE BEING SHIPPED BY KAPCO ON BEHALF OF BE AEROSPACE CONSUMABLES MANAGEMENT, UNDER LICENSING AGREEMENT.									
		S/L: UNLTD ARP5316									
		INSP BY: Yvette Ramos 11/23/2010									

The merchandise listed has been produced in accordance with Fair Labor Standards Act of 1938 as amended. No claims allowed unless made within ten (10) days after receipts of Goods and in no case shall the liability assumed by us under the guarantees either expressed or implied, exceed the face value of the invoice for the merchandise in question.

These commodities, technology or software were exported from the United States in accordance with the Export Administration Regulations. Diversion contrary to U.S. Law is prohibited.

SHIPPED UNDER NLB HSP8803.30.0010 - ECCN: 9A991.D

COUNTRY OF ORIGIN: USA

TOTAL BOX VALUE:

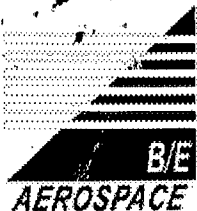
PAGE 1



CERTIFICATE OF CONFORMANCE

WE HEREBY CERTIFY THAT THE PRODUCT SUPPLIED IS NEWLY MANUFACTURED, CONFORMS TO THE APPROVED DESIGN DATA, AND MEETS ALL REQUIREMENTS OF THE APPLICABLE PURCHASE ORDER. EVIDENCE OF CONFORMANCE IS ON FILE AND AVAILABLE FOR REVIEW UPON REQUEST.

TIM GILL
CORPORATE VICE PRESIDENT OF QUALITYThank You For This Order
PACKING LIST



B/E Aerospace, Inc.

Page: 1 of 1

CONSUMABLES MANAGEMENT

P.O. Box 025263, Miami, FL 33102-5263 • Tel: 305.925.2600 • Fax: 305.507.7191
Plant Location: 10000 N.W. 15th Terrace, Miami, FL 33172 • SITA: MIAMMCR
www.beconsumables.com

Shipped From: 10000 NW 15 TERRACE, MIAMI, FL 33172


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FIRM: DART AEROSPACE LTD

PURCHASE ORDER#: PO24431

LNE#	QUANTITY	U/M	PART-NUMBER	CUST REF#	LOT-NUMBER	MANUFACTURER	CCODE	MFR DATE	EXP DATE
7	200	EA	NAS1149DN949J		9650-4/25/13	MOELLER MPG	58009		


Jason Lewis
Vice President of Quality

06/03/14

**MOELLER MFG. & SUPPLY, INC.**

805 EAST CERRITOS • ANAHEIM, CA 92805

(714) 999-5551 • FAX (714) 999-5970

<http://www.moellermfg.com>

cage code: 58009

SHIPPER NO. : 42536

**CERTIFICATION
PACKING LIST**S
O
L
D
T
O
B/E AEROSPACE CONSUMABLES
MANAGEMENT
PO BOX 025263

MIAMI

FL 33102-5263

Customer #: B/E AER-FL

S
H
I
P
T
O
B/E AEROSPACE CONSUMABLES
MANAGEMENT
9835 NW 14TH ST

MIAMI

FL 33172

P.O. #: ONXE08

DATE ORDER REC'D.	ORDER NO.	COMMENTS	SHIPPED VIA	TERMS	DUE
4/24/2013	ONXE08		FED X GRD	1%-10/N-30	5/30/2013
ITEM	ORDERED	SCHEDULED	SHIPPED	PART NUMBER/DESCRIPTION	NET WT.
01	15,000	15,000	15,000 RL	NAS1149DN949J {S} REV. 5 910-A AN960JD9 REV. 21 LOT 9650- <u>4/25/13</u> FULL CERTS ABCEFHPUV	15,000 12.85

MANUFACTURED IN THE U.S.A.

MOELLER MFG. & SUPPLY, INC. - PACKING LIST & CERTIFICATION

WE CERTIFY THAT THE MATERIAL ON THIS ORDER CONFORMS IN ALL RESPECTS TO THE CURRENT APPLICABLE GOVERNMENT AND/OR MANUFACTURER'S SPECIFICATIONS.

1. ALL ITEMS ABOVE ARE MANUFACTURED IN ACCORDANCE WITH THE MATERIAL AND PROCESSING SPECIFICATIONS OF THIS ORDER. WE ALSO CERTIFY THAT THESE PARTS HAVE NOT COME IN CONTACT WITH MERCURY WHILE IN OUR POSSESSION.
2. THE GOODS COVERED BY THIS INVOICE WERE PRODUCED IN COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS OF THE FAIR LABOR STANDARD ACTS OF 1938, AS AMENDED. ALL CLAIMS FOR ERRORS OR SHORTAGES MUST BE MADE WITHIN 10 DAYS AFTER RECEIPT OF GOODS. NO GOODS TO BE RETURNED WITHOUT WRITTEN AUTHORIZATION. ALL CLAIMS FOR DEFECTIVE MATERIAL MUST BE FILED WITHIN 30 DAYS OF SHIPMENT TO RECEIVE CONSIDERATION. WE DO NOT ASSUME FINANCIAL RESPONSIBILITY FOR LIABILITY FROM THE USE OF PRODUCTS SOLD, OTHER THAN REPLACEMENT VALUE OF THE PRODUCTS SOLD, IF CLAIMED WITHIN THE SPECIFIED TIME LIMIT ABOVE.
3. PARTS ARE TO BE CONSIDERED ITAR EXEMPT OR DUAL PURPOSE UNLESS OTHERWISE STATED.

BY

BARRY LUKE, Q.A. MANAGERRECEIVED IN
GOOD CONDITION BY
DATE

5/30/13

PACKED BY

RL

BAGS

CARTONS

GROSS WT.

14

MOELLER MANUFACTURING. & SUPPLY, INC. • 805 EAST CERRITOS • ANAHEIM, CA 92805 • U.S.A.



B/E Aerospace, Inc.

Page: 1 of 1

CONSUMABLES MANAGEMENT

P.O. Box 025263, Miami, FL 33102-5263 • Tel: 305.925.2600 • Fax: 305.507.7191
Plant Location: 10000 N.W. 15th Terrace, Miami, FL 33172 • SITA: MIAMMCR
www.beconsumables.com

Shipped From: 10000 NW 15th Terrace, MIAMI, FL 33172


Material Certification

The items set forth on the purchase order referred to below have been visually inspected and the dimensions thereof have been measured by us, and based on the aforesaid, as well as the representation made to us by the manufacturers of the items subject of such purchase order, we hereby certify that such items are in conformity with all current governmental and manufacturer's requirements, specifications, drawings, and conform to the purchase order requirements. Said items are in new condition and have not been obtained from any U.S. Government or Military source and are traceable to B/E Aerospace, Inc.

FIRM: DART AEROSPACE LTD

PURCHASE ORDER#: PO24431

LINE#	QUANTITY	U/M	PART-NUMBER	CUST REF#	LOT-NUMBER	MANUFACTURER	CCODE	MFR DATE	EXP DATE
9	75	EA	NAS391B6P		X7228	ANILLO INDUSTRIES	10630		


Jason Lewis
Vice President of Quality

06/03/14



B/E Aerospace, Inc.

Page: 1 of 1

CONSUMABLES MANAGEMENT

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FIRM: DART AEROSPACE LTD

PURCHASE ORDER#: PO24431

LINE#	QUANTITY	U/M	PART-NUMBER	CUST REF#	LOT-NUMBER	MANUFACTURER	CCODE	MFR DATE	EXP DATE
4	50	EA	AN4C21A		16613	AIRPASCO INDUSTRIES	32958		


Jason Lewis
Vice President of Quality

06/03/14



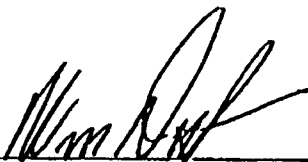
AIRFASCO
INDUSTRIES
MANUFACTURER OF AEROSPACE PRODUCTS

2655 HARRISON AVE. SW
CANTON, OH 44706
PHONE: (330)430-6190
FAX: (330)430-6199

CERTIFICATE OF CONFORMANCE

M&M AEROSPACE HARDWARE

I hereby certify that on 10/5/2009 AIRFASCO Industries provided the supplies called for by Contract/ PO Number 0HE167 in accordance with all applicable requirements for shipment. I further state that the process certifications are in conformance with the contract requirements, including specifications and/or drawings, physical item identification (part number) and the quantity shown on this or attached acceptance document. The part numbers certified below have been manufactured in the United States.


WM. DENT

Quality Assurance Representative

PART NUMBER	LOT NUMBER	QUANTITY	PART NUMBER	LOT NUMBER	QUANTITY
AN4C21A	16613	10,000			

CIF3-0



B/E Aerospace, Inc.

Page: 1 of 1

CONSUMABLES MANAGEMENT

P.O. Box 025263, Miami, FL 33102-5263 • Tel: 305.925.2600 • Fax: 305.507.7191
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www.beconsumables.com

Shipped From: 10000 NW 15 TERRACE, MIAMI, FL 33172


Material Certification

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FIRM: DART AEROSPACE LTD

PURCHASE ORDER#: PO24431

LIN#	QUANTITY	U/M	PART-NUMBER	CUST REF#	LOT-NUMBER	MANUFACTURER	CCODE	MFR DATE	EXP DATE
1	20	EA	AN3C21A		60111	MAC FASTENERS	0RPT4		


Jason Lewis
Vice President of Quality

06/03/14

MACFASTENERS, INC.

1110 Enterprise Street
Ottawa, KS 66067
Phone: 785-242-8812
Fax: 785-242-4616

Packing List

Bill B/E AEROSPACE CONSUMABLES MGMT
To: 10000 NW 15TH TERRACE
MIAMI, FL 33172

Ship B/E AEROSPACE CONSUMABLES MGMT
To: 9835 NW 14th Street
Miami, FL 33172
United States

Shipment No: 56211
Shipment Date: 11/13/12
Ship Via: United Parcel Service
Order Number: 43945
Order Date: 12/04/11

Customer Code: BE AEROSPACE
Phone: (305) 925-2600
PO Number: 0EBA17
Terms: Net 30 Days

LOT #60111

<u>Item</u>	<u>Quantity</u>				<u>Unit</u>	<u>Description</u>	<u>Revision</u>	<u>Job Number</u>
	<u>Open</u>	<u>Shipped</u>	<u>Back Ord</u>	<u>Canceled</u>				
1	2,319	2,780	0		M	AN3C21A Bolt, machine— Aircraft	2	60111

MAC FASTENERS, INC.
1110 ENTERPRISE
OTTAWA, KANSAS 66067

**CERTIFICATE OF CONFORMANCE
AND
MANUFACTURER'S AFFIDAVIT**

CUSTOMER: B/E AEROSPACE

PO: 0EBA17

PART NUMBER: AN3C21A

REV: 2

LOT NUMBER: 60111

MANUFACTURED QUANTITY: 2,780

MILL HEAT NUMBER: 563289

COUNTRY OF ORIGIN: UNITED STATES OF AMERICA

DFARS 252.225.7009 Compliant

MERCURY FREE CERTIFICATION

MacFasteners Inc. certifies that the parts referenced in the above lot number do not contain Mercury or Mercury compounds, and were manufactured in a Mercury free environment.

We certify that the parts furnished against the above referenced purchase order were manufactured by MAC FASTENERS, INC. within the United States, and were processed in accordance with all applicable drawings and specifications.

Objective evidence of compliance is on file, subject to examination upon request.

DATE: 11/09/12


QUALITY ASSURANCE REPRESENTATIVE

MacFasteners, Inc. is an AS9100C Registered Company- SAI GLOBAL - 0058029

MAC FASTENERS, INC.
1110 EAST ENTERPRISE
OTTAWA, KS 66067

CHEMICAL & PHYSICAL TEST REPORT

CUSTOMER B/E AEROSPACE	PO NUMBER 0EBA17	MFG QUANTITY 2,780	DATE 11/09/12
PART NUMBER AN3C21A	REV 2	LOT NO 60111	PROCUREMENT SPEC NASM6812

MATERIAL TYPE 431				MATERIAL SPECIFICATION ASTM A493				MILL HEAT NUMBER 563289			SUPPLIER CARPENTER		
C	SI	Mn	P	S	Cu	Ni	Cr	Mo	V	B	Fe	Al	Ti
.16	.51	.61	.018	.002		1.53	16						
	Co	N	Bi	Pb	Mg	Zn		Nb	Sn		Other		

MECHANICAL TEST RESULTS - TESTING PER NASM1312

ULTIMATE TENSILE STRENGTH POUNDS	
3,250	
3,220	
3,220	
3,230	
3,230	
MIN. REQ.	2210

DOUBLE SHEAR STRENGTH POUNDS / PSI	
5,120	
5,100	
5,100	
5,110	
5,130	
MIN. REQ.	4250

HARDNESS	
ROCKWELL "C" SCALE	
REQ.	26 - 32 HRC
SAMPLE SIZE	5
ACTUAL RESULTS	
30-32 HRC	

METALLURGICAL EXAMINATION			
Discontinuities	<input checked="" type="checkbox"/>	Carb/Decarb	<input checked="" type="checkbox"/>
Grain Flow	<input checked="" type="checkbox"/>	Microstructure	<input checked="" type="checkbox"/>
Grain Size	<input checked="" type="checkbox"/>	Appearance	<input checked="" type="checkbox"/>
Thread Inspection FED-STD-H28/20 - ASME B1.3		System <input type="checkbox"/> 21	System <input checked="" type="checkbox"/> 22
			System <input type="checkbox"/> 23

NDT/ ADDITIONAL TESTS	
Magnetic Particle Inspection per ASTM E1444	<input checked="" type="checkbox"/>
Liquid Penetrant Inspection per ASTM E1417	<input type="checkbox"/>
Recess Torque Test	<input type="checkbox"/>
Head Marking	<input checked="" type="checkbox"/>

TEST CERTIFICATION

WE CERTIFY THAT THE PART NUMBER, LOT NUMBER, AND SAMPLES REFERENCED ABOVE HAVE BEEN TESTED IN ACCORDANCE WITH THE APPLICABLE SPECIFICATION FOR THE TESTS REPORTED HEREIN. THIS CERTIFICATION SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT THE APPROVAL OF MAC FASTENERS, INC.


 Quality Assurance Representative

AS9100C REGISTERED
SAI GLOBAL - 0058029

MAC FASTENERS, INC.
1110 ENTERPRISE
OTTAWA, KANSAS 66067

HEAT TREAT CERTIFICATION

CUSTOMER: B/E AEROSPACE

DATE: 11/09/12

PO NUMBER: 0EBA17

MANUFACTURED QUANTITY: 2,780

LOT NUMBER: 60111

MATERIAL: TYPE 431

PART NUMBER: AN3C21A

REVISION: 2

REQUIRED HARDNESS: 26 - 32 HRC

SAMPLE SIZE: 5

HARDNESS: 30-32 HRC

HEAT TREAT SPECIFICATION AS APPLICABLE: MIL-H-6875/AMS-H-6875/AMS2759/AMS5853/PS-1001

The fasteners referenced in this report have been processed, inspected and certified by the Heat Treat Contractor in accordance with all applicable drawings and specifications. Heat Treatment has been verified in accordance with procurement specification and part drawing, by metallurgical and mechanical testing as applicable. Evidence of compliance as well as certification from the Heat Treat Contractor is on file and subject to examination upon request.


QUALITY ASSURANCE REPRESENTATIVE

DE TRAY Plating Works

Specialized Electro-Plating and Polishing

Nickel

Copper

Decorative Chrome

Satin Chrome

Zinc

Cadmium

Passivate

Bright Dip

Strip Copper

Descale

10406 EAST ELEVENTH STREET • INDEPENDENCE, MISSOURI 64052
Phone (816) 252-8411 Fax (816) 252-8527 • E-mail: DeTrayPlating@aol.com

Passivate Treatment per QQ-P-35C/SAE AMS QQ-P-35/AMS 2700

CUSTOMER: Mac Fasteners, Inc.

Lot#: 60111

PART NUMBER: AN3C21A

PROCUREMENT SPECIFICATION: n/a

OTHER CONTRACTURAL REQUIREMENTS:

MATERIAL: 431

QUANTITY: 48 lbs

INVOICE NUMBER: 165521

Certification Statement:

We certify that the above referenced lot was processed, tested, and inspected in accordance with QQ-P-35C/SAE AMS-QQ-P-35, Type II, AMS2700 Method 1, Type 2, Class 1.

DE TRAY PLATING WORKS

NAME: 

JOB TITLE: VICE-PRESIDENT

DATE: 11/09/2012

CERTIFICATE OF TESTS
CERT SERIAL# 000783927

ABNAHMEPRUEFZEUGNIS

CERTIFICAT DE CONTROLE



CARPENTER

Carpenter Technology Corporation
101 West Bern Street, Reading, Pa. 19601
Tel: (610) 208-2000 (800) 338-4592

- THE RECORDING OF FALSE, FICTITIOUS OR FRAUDULENT STATEMENTS OR ENTRIES ON THIS DOCUMENT MAY BE PUNISHED AS A FELONY UNDER FEDERAL STATUTES INCLUDING FEDERAL LAW, TITLE 18, CHAPTER 47.
- THE VALUES AND OTHER TECHNICAL DATA REPRESENT THE RESULTS OF ANALYSES AND TESTS MADE ON SAMPLES COLLECTED FROM THE TOTAL LOT. ORIGINAL DATA RECORDS CAN BE TRACED BY REFERENCE TO THE CARPENTER ORDER NUMBER.
- MATERIAL IS MANUFACTURED FREE FROM MERCURY, RADIUM, ALPHA AND GAMMA SOURCE CONTAMINATION.
- THIS DOCUMENT SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT THE WRITTEN CONSENT OF CARPENTER TECHNOLOGY CORPORATION.

07/19/11

CUSTOMER/BESTELLER/CLIENT

SELLER/VERKÄUFER/VENDEURPAGE 1 OF 1

MAC FASTENERS INC

1110 E. ENTERPRISE
OTTAWA KS 66067

BOL

CUSTOMER ORDER NO./BESTELL-NR./N° DE COMMANDE	CARPENTER NO./WERKS-NR./N° DE REFERENCE INTERNE	DATE/DATUM/DATE	WEIGHT/GEWICHT/POIDS
56366	W86508	07/19/11	6863.000

HEAT NUMBER / SCHMELZE-NR. / N° DE COULEE: 563289

PRODUCT DESCRIPTION: TYPE 431 ANNEALED COLD FINISH SEAM FREE C HDG CL K2 HVY
----- CU/SOAP TENSILE MAX 115.0 KSI

SPECIFICATION: ASTM-A493-09

SIZE 0.187500 IN. (4.76 MM) RD WIRE

PRIMARY HEAT CHEMISTRY(WT%): (TEST METHOD IS SHOWN IN PARENTHESIS)

C (COM)	MN(XRF)	SI(XRF)	P (XRF)	S (COM)	CR(XRF)
0.16	0.61	0.51	0.018	0.002	16.0
NI(XRF)					
1.53					

TENSILE AS SHIPPED, KSI(MPA) 100.0(689)
-- -----

MATERIAL PRODUCED ON THIS ORDER WAS MELTED AND MANUFACTURED IN THE U.S.A.
MATERIAL HAS BEEN MELTED IN USA OR QUALIFYING COUNTRY TO DEARS REQUIRE-
MENTS 252.225-7014 WITH ALTERNATE 1 FOR QUALIFYING COUNTRY 225.872.1,
SUPERSEDED BY DEARS REQUIREMENTS DEARS 252.225-7008 AND 252.225-7009.
CARPENTER'S QUALITY MANAGEMENT SYSTEM WAS REGISTERED AS OF NOVEMBER 24, 2010 TO
THE REQUIREMENTS OF ISO 9001:2008 APPROVAL CERTIFICATE 10-1385R BY PERFORMANCE
REVIEW INSTITUTE. CERTIFICATE OF TEST IS PREPARED IN ACCORDANCE WITH PARAGRAPH
3.1 OF EN 10204 (DIN 50049). WE HEREBY CERTIFY THAT THE ABOVE TEST DATA ARE
IN ACCORDANCE WITH THE PURCHASE ORDER AND SPECIFICATION REQUIREMENTS.

DEANA KISSLING
ADMINISTRATOR - QUALITY
CARPENTER TECHNOLOGY CORPORATION

Deana M. Kissling

This certification is made to the customer printed on this form. Carpenter neither makes, nor assumes responsibility for, any representation or certification to other parties.
Die vorliegende Zertifizierung ist nur für den in diesem Formular genannten Kunden gültig. Carpenter übernimmt gegenüber Dritten keinerlei Haftung für die ausgewiesenen Daten oder Zertifizierungen.
Ce certificat est uniquement valable pour le client dont le nom est imprimé sur ce formulaire. Carpenter n'assume pas de responsabilité pour une certification vis-à-vis d'une tierce personne.

OEBA17 0

2780 11/19/12

AN3C21A

TOTAL O/O: 125 WHSE ONHAND: 0

MINIMUM: 0 MAXIMUM: 0

MIAMI BACKORDERS: 125

*09/19/12 023340 HONEYWELL TO 4203499857	25	EA	11/19/12	87MEV5	(FBO/MRO)
*09/19/12 023340 HONEYWELL TO 4203499857	25	EA	11/19/12	87MET0	(FBO/MRO)
*09/19/12 023340 HONEYWELL TO 4203499857	25	EA	11/19/12	87MEJ4	(FBO/MRO)
*10/25/12 009258 IAI PRDXN L0082149020	5	EA	12/05/12	88X2B3	(OEM)

REM STK XFER 439286 07/19/12	11	015373 CESSNA AIRCRAFT CO	21
REM STK XFER 463582 09/24/12	11	015373 CESSNA AIRCRAFT CO	5
REM STK XFER 485013 11/13/12	12	015507 CESSNA AIRCRAFT CO	30

Warehouse 2: Parts Falling below a 6 Month Trend Quantity

Part No.	Description	Quantity	UOM
AN3C21A	BOLT	228	Pcs

21 to WH 11
30 to WH 12
81 to WH 102

BALANCE TO WHSE 2



B/E Aerospace, Inc.

Page: 1 of 1

CONSUMABLES MANAGEMENT

P.O. Box 025263, Miami, FL 33102-5263 • Tel: 305.925.2600 • Fax: 305.507.7191
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www.beconsumables.com

Shipped From: 10000 NW 15 TERRACE, MIAMI, FL 33172


Material Certification

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FIRM: DART AEROSPACE LTD

PURCHASE ORDER#: PO24431

LNE#	QUANTITY	U/M	PART-NUMBER	CUST REF#	LOT-NUMBER	MANUFACTURER	CCODE	MFR DATE	EXP DATE
6	50	EA	AN6-13A		57949	MAC FASTENERS	ORPT4		


Jason Lewis
Vice President of Quality

06/03/14

MACFASTENERS, INC.

1110 Enterprise Street
Ottawa, KS 66067
Phone: 785-242-8812
Fax: 785-242-4616

Packing List**Bill** UFC Aerospace Corp.**To:** PO BOX 2061

HOLTSVILLE, NY 11742-2061

United States

Ship UFC Aerospace Corp.**To:** 100 CORPORATE DRIVE

HOLTSVILLE, NY 11742

United States

Shipment No: 51842**Shipment Date:** 12/20/11**Ship Via:** Yellow Freightways, Inc.**Order Number:** 42773**Order Date:** 08/18/11**Customer Code:** UFC**Phone:** (561) 637-1737**PO Number:** PUR03AB8**Terms:** Net 30 Days

LOT #57949

<u>Item</u>	<u>Quantity</u>				<u>Unit</u>	<u>Description</u>	<u>Revision</u>	<u>Job Number</u>
	<u>Open</u>	<u>Shipped</u>	<u>Back Ord</u>	<u>Canceled</u>				
1	10,000	12,000	0		M	AN6-13A Bolt, machine— Aircraft	2	57949

JAN 04 2012



MAC FASTENERS, INC.
1110 ENTERPRISE
OTTAWA, KANSAS 66067

**CERTIFICATE OF CONFORMANCE
AND
MANUFACTURER'S AFFIDAVIT**

CUSTOMER: UFC AEROSPACE CORP

PO: PUR03AB8

PART NUMBER: AN6-13A

REV: 2

LOT NUMBER: 57949

MANUFACTURED QUANTITY: 12,000

MILL HEAT NUMBER: 8097919

COUNTRY OF ORIGIN: UNITED STATES OF AMERICA

DFARS 252.225-7014, ALTERNATE 1 COMPLIANT

MERCURY FREE CERTIFICATION

MacFasteners Inc. certifies that the parts referenced in the above lot number do not contain Mercury or Mercury compounds, and were manufactured in a Mercury free environment.

We certify that the parts furnished against the above referenced purchase order were manufactured by MAC FASTENERS, INC. within the United States, and were processed in accordance with all applicable drawings and specifications.

Objective evidence of compliance is on file, subject to examination upon request.

DATE: 12/18/11


QUALITY ASSURANCE REPRESENTATIVE



MacFasteners, Inc. is an AS9100/ISO9001 Registered Company - PJR# C2009-00297

MAC FASTENERS, INC.
1110 EAST ENTERPRISE
OTTAWA, KS 66067

CHEMICAL & PHYSICAL TEST REPORT

CUSTOMER UFC AEROSPACE CORP	PO NUMBER PUR03AB8	MFG QUANTITY 12,000	DATE 12/18/11
PART NUMBER AN6-13A	REV 2	LOT NO 57949	PROCUREMENT SPEC NASM6812

MATERIAL				MATERIAL SPECIFICATION				MILL HEAT NUMBER			SUPPLIER		
TYPE 8740				MIL-S-6049/AMS6322				8097919			JOHNSTOWN		
C	SI	Mn	P	S	Cu	Ni	Cr	Mo	V	B	Fe	Al	Ti
.39	.25	.85	.008	.01	.15	.42	.52	.2	.002			.03	
	Co	N	Bi	Pb	Mg	Zn		Nb	Sn			Other	
		.0074							.007				

MECHANICAL TEST RESULTS - TESTING PER NASM1312

ULTIMATE TENSILE STRENGTH POUNDS
12,400
12,400
12,360
12,360
12,360
MIN. REQ. 10100

DOUBLE SHEAR STRENGTH POUNDS / PSI
17,000
17,000
17,080
17,100
17,060
MIN. REQ. 16560

HARDNESS
ROCKWELL "C" SCALE
REQ. 26 - 32 HRC
SAMPLE SIZE 5
ACTUAL RESULTS 27-29 HRC

METALLURGICAL EXAMINATION			
Discontinuities	<input checked="" type="checkbox"/>	Carb/Decarb	<input checked="" type="checkbox"/>
Grain Flow	<input checked="" type="checkbox"/>	Microstructure	<input checked="" type="checkbox"/>
Grain Size	<input checked="" type="checkbox"/>	Appearance	<input checked="" type="checkbox"/>
Thread Inspection FED-STD-H28/20 - ASME B1.3	System 21 <input type="checkbox"/>	System 22 <input checked="" type="checkbox"/>	System 23 <input type="checkbox"/>

NDT/ ADDITIONAL TESTS	
Magnetic Particle Inspection per ASTM E1444	<input checked="" type="checkbox"/>
Liquid Penetrant Inspection per ASTM E1417	<input type="checkbox"/>
Recess Torque Test	<input type="checkbox"/>
Head Marking	<input checked="" type="checkbox"/>

TEST CERTIFICATION

WE CERTIFY THAT THE PART NUMBER, LOT NUMBER, AND SAMPLES REFERENCED ABOVE HAVE BEEN TESTED IN ACCORDANCE WITH THE APPLICABLE SPECIFICATION FOR THE TESTS REPORTED HEREIN. THIS CERTIFICATION SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT THE APPROVAL OF MAC FASTENERS, INC.



Quality Assurance Representative

AS9100, ISO9001 REGISTERED
PJR #C2009-00297

MAC FASTENERS, INC.
1110 ENTERPRISE
OTTAWA, KANSAS 66067

HEAT TREAT CERTIFICATION

CUSTOMER: UFC AEROSPACE CORP

DATE: 12/18/11

PO NUMBER: PUR03AB8

MANUFACTURED QUANTITY: 12,000

LOT NUMBER: 57949

MATERIAL: TYPE 8740

PART NUMBER: AN6-13A

REVISION: 2

REQUIRED HARDNESS: 26 - 32 HRC

SAMPLE SIZE: 5

HARDNESS: 27-29 HRC

HEAT TREAT SPECIFICATION AS APPLICABLE: MIL-H-6875/AMS-H-6875/AMS2759/AMS5853/PS-1001

The fasteners referenced in this report have been processed, inspected and certified by the Heat Treat Contractor in accordance with all applicable drawings and specifications. Heat Treatment has been verified in accordance with procurement specification and part drawing, by metallurgical and mechanical testing as applicable. Evidence of compliance as well as certification from the Heat Treat Contractor is on file and subject to examination upon request.


QUALITY ASSURANCE REPRESENTATIVE





**Johnstown
Wire
Technologies**

124 Laurel Ave,
Johnstown, PA 15906

Phone: 814-532-5680
Fax: 814-532-5684

WORK ORDER
924240

TEST REPORT

LOT NUMBER
K-8097919

SALES ORDER / RLS
995524 / 1

SOLD TO

Mac Fasteners, Inc.
1110 Enterprise Street
Ottawa, KS 66067
USA



CUSTOMER P.O. 50516	CUSTOMER PART	QUANTITY 19,931 LBS	COILS 10	LADING NO 00105772	SHIPMENT DATE 08/12/2011
SPECIFICATION Macfast-87371 AMS2301; AMS6322; AMS-S-6049A; MIL-S-6049A 8740 DFARS Defense Federal Acquisition Regulation Supplement Silicon Killed Fine Grain Aircraft Quality/Cold Heading Quality Drawn From Annealed Rod Spheroidize Annealed In Process Heavy Phos & Light Lube Ctd Size: .371 +.001 -.000					
CERTIFICATION REQUIREMENTS					
Chemical					
C .39	Mn .85	P .008	S .010	Si .25	Al .030
Ni .42	Cr .52	Mo .20	Cu .15	V .002	
Cb .001	Ti ???????	N .0074	Sn .007		
Physical					
AMS 2301 0000	J1 58	J10 40	J11 38	J12 36	J2 57
					J3 56
					J5 54
					J4 55
					J6 52
					J7 49
					J8 46
					J9 43
MacroClean E-381 111					
Mechanical					
TEST	UNITS	HIGH	LOW	AVERAGE	
Tensile Str	Lbs/SqIn	80000	77000	78000	
RA Per Cent	Percent	73.4	70.5	72.1	
Decarb FFD	Inches	.000	.000	.000	
Surface def. depth	Inches	.000	.000	.000	
Rod / Melt Source					
Rod Source Republic	Melt Source Republic	Country of Origin USA	Nafta Yes		
End of Certification					



I certify that the results are a true and correct copy of the records prepared and maintained by JOHNSTOWN WIRE TECHNOLOGIES in compliance with the requirements of the cited specification. Chemistry is as reported by the rod / bar supplier and is not in JWT AZLA accreditation. This test report cannot be reproduced or distributed except in full without the written permission of JOHNSTOWN WIRE TECHNOLOGIES. The test results certified herein relate only to the items tested.

D. L. Deetscreek
D. L. Deetscreek
Director of Quality Assurance



LORAIN, OH 44055
FAX: 330-438-5605

REPUBLIC ENGINEERED PRODUCTS

July 3, 2011

PAGE 1

OF 2

PURCHASE ORD: 80881
PART NUMBER: FX140AA-.659
ORDER NUMBER: 1488320 - 01
HEAT: 8097912

PURCHASE ORDER DATE:	5/16/2011
ACCOUNT NUMBER:	5672-1921-01
SCHEDULE:	5654-90
REVISION:	1

JOHNSTOWN WIRE TECHNOLOGIES
124 LAUREL AVE
JOHNSTOWN, PA 15906

JOHNSTOWN WIRE TECHNOLOGIES
EDWARD ZAPOLA
C/O C & BL RAILROAD
TRACK 629
JOHNSTOWN, PA 15901

MATERIAL DESCRIPTION

----- MATERIAL DESCRIPTION -----
HOT ROLLED STEEL COILS ALLOY AMS 2301K JOHNSTOWN WIRE SPEC RW-100 REVISION DTD 04/21/04 EXC PARA
10.3 AMS G322N EXC HARD JOHNSTOWN WIRE SPEC RW-005 REVISION DTD 12/31/00 EXC SURFACE DEFECTS
JOHNSTOWN WIRE SPEC PART NO. FXT400A REVISION DTD 12/31/00 MLL S 6049A & AMD 1 COND B-1 EXC MARK &
UT WAIVED EF-AISI 8740-H FINE GRAIN VACUUM DEGASSED AIRCRAFT QUALITY FIXED PRACTICE QUALITY
RESTRICTED CHEMISTRY RESTRICTED MAX INCIDENTAL ELEMENTS
SIZE: RDS .6590 DIAM X COIL
RDS 16.7385MM DIAM X COIL.

LADLE CHEMISTRY 4

C			LADLE CHEMISTRY %				
	MM	P	S	SI	CU	NI	CR
0.39	0.85	0.008	0.010	0.25	0.15	0.42	0.52
V	MO	SN	AL	B	CB	N	
0.002	0.20	0.007	0.030	0.0000	0.001	0.0074	

CALCULATED TESTS

REDUCTION RATIO 381.3 TO 1

AUSTENITIC GRAIN SIZE 5 OR FINEER BASED ON A TOTAL ALUMINUM CONTENT EQUAL TO OR GREATER THAN .020% PER ASTM A29.

SEMI - FINISHED RESULTS

JOMINY HARDNESS TEST

SAE J406/ASTM A255

SAC J40G/ASTM A255																							
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	18	20	22	24	26	28	30	32
58	57	56	55	54	52	49	46	43	40	38	36	35	34	33	32	31	30	29	29	29	28	28	28

MACRO ETCH TEST

ASTM E381/MIL STD 430

ETCHANT: HCL TEMPERATURE: 170

	S	R	C
AVG	1	1	1

MAGNETIC PARTICLE TEST

AMS 2301 AMS2304 AMS2300

	IND	AVG	IND	AVG
	FREQ	FREQ	SEV	SEV
PCE 03	0	0	0	0

FINISHED SIZE RESULTS

DECARBURIZATION TEST

SAB J419/ASTM E1077/JLS Q0558

STCHANT = NITAL MAGNIFICATION = 100X

	SPIKE INCHES	COMPLETE INCHES	TOTAL DEPTH INCHES
PCB 9173	0.003	0	0.003

G. KRUTH

DIRECTOR QUALITY ASSURANCE

BY HILDA BEGUE



MT Knott



Republic

1807 EAST 28TH ST.
PHONE: 330-438-5694

LORAIN, OH 44051
FAX: 330-438-5691

CERTIFICATE OF TESTS

REPUBLIC ENGINEERED PRODUCTS

July 3, 2011

PAGE 1

QF 2

PURCHASE ORD: 80881

PART NUMBER: PKT40AA-.659

ORDER NUMBER: 1488320 - 01

HEAT: 8097919

PURCHASE ORDER DATE: 5/16/2011

ACCOUNT NUMBER: 5672-1921-01

SCHEDULE: 5654-90

REVISION: 1

CAPABLE OF SEAM DEPTH 14 MAX DIAMETER NOT LESS THAN .005 MAX

NOTES

CHEMICAL ANALYSIS CONFORMS TO APPLICABLE SPECS: ASTM E415, LBL10129, LBL10130, ASTM E1019, LBL10158, LBL10114, AND ASTM E1085, LBL10184, LBL10188.

REPUBLIC ENGINEERED PRODUCTS HEREBY CERTIFY THAT THE MATERIAL LISTED HEREIN HAS BEEN INSPECTED AND

TESTED IN ACCORDANCE WITH THE METHODS PRESCRIBED IN THE GOVERNING SPECIFICATIONS AND BASED UPON THE RESULTS OF SUCH INSPECTION AND TESTING HAS BEEN APPROVED FOR CONFORMANCE TO THE SPECIFICATIONS.

CERTIFICATE OF TESTS SHALL NOT BE REPRODUCED EXCEPT IN FULL.

ALL TESTING HAS BEEN PERFORMED USING THE CURRENT REVISION OF THE TESTING SPECIFICATIONS.

RECORDING OF FALSE, FICTITIOUS OR PRADDULENT STATEMENTS OR ENTRIES ON THIS DOCUMENT MAY BE PUNISHED AS A FELONY UNDER FED STATUES TITLE 18 CHAPTER 47.

THE MATERIAL WAS NOT EXPOSED TO MERCURY OR ANY METAL ALLOY THAT IS LIQUID AT AMBIENT TEMPERATURE DURING PROCESSING OR WHILE IN OUR POSSESSION.

NO WELD OR WELD REPAIR WAS PERFORMED ON THIS MATERIAL.

THE RESULTS REPORTED RELATE ONLY TO THE ITEMS TESTED

SOURCE INFORMATION

MELT SOURCE: CANTON CAST ROLL MELT COUNTRY: U.S.A HOT ROLL SOURCE: LORAIN 9/10, U.S.A

MELT METHOD: EF BLOOM RED. RATIO: 381.3

END OF DATA

CC

END OF DATA

WITH SHIPMENT 1 COPY PRINTED AT SHIPPING AREA

FAX SHIP TO 1 COPY ATTENTION EDWARD ZAPOLA

FILE 1 COPY

1-814-532-5684

G. KRUTH
DIRECTOR QUALITY ASSURANCE

BY HILDA BEGUE



MT Kruth

DE TRAY Plating Works

Specialized Electro-Plating and Polishing
Nickel
Copper
Decorative Chrome
Satin Chrome
Zinc
Cadmium
Passivate
Bright Dip
Strip Copper
Descale

10406 EAST ELEVENTH STREET • INDEPENDENCE, MISSOURI 64052
Phone (816) 252-8411 Fax (816) 252-8527 • E-mail: DeTrayPlating@aol.com

December 13, 2011

Mac Fasteners
1110 Enterprise Street
Ottawa, Kansas 66067

Subject: Certification

This is to certify that the following parts have been electrodeposited cadmium plate per Spec.-QQ-P-416/AMS-QQ-P-416/NAS4160/AMS2400, Type II, Class 2. Please reference our Invoice# 157861 dated 12/13/2011 for:

Lot#-57949

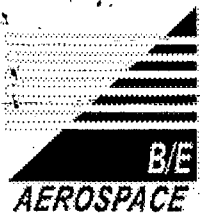
P.N.- AN6-13A

James T. Pierson, Vice-President



DE TRAY PLATING WORKS





B/E Aerospace, Inc.

Page: 1 of 1

CONSUMABLES MANAGEMENT

P.O. Box 025263, Miami, FL 33102-5263 • Tel: 305.925.2600 • Fax: 305.507.7191
Plant Location: 10000 N.W. 15th Terrace, Miami, FL 33172 • SITA: MIAMMCP
www.beconsumables.com

Shipped From: 10000 NW 15 TERRACE, MIAMI, FL 33172


Material Certification

The items set forth on the purchase order referred to below have been visually inspected and the dimensions thereof have been measured by us, and based on the aforesaid, as well as the representation made to us by the manufacturers of the items subject of such purchase order, we hereby certify that such items are in conformity with all current governmental and manufacturer's requirements, specifications, drawings, and conform to the purchase order requirements. Said items are in new condition and have not been obtained from any U.S. Government or Military source and are traceable to B/E Aerospace, Inc.

FIRM: DART AEROSPACE LTD

PURCHASE ORDER#: PO24431

LINE#	QUANTITY	U/M	PART-NUMBER	CUST REF#	LOT-NUMBER	MANUFACTURER	CCODE	MFR DATE	EXP DATE
2	200	EA	AN4-12A		12564	AIRFASCO INDUSTRIES	32958		


Jason Lewis
Vice President of Quality

06/03/14



AIRFASCO
INDUSTRIES
MANUFACTURER OF AEROSPACE PRODUCTS

2655 HARRISON AVE. SW
CANTON, OH 44706
PHONE: (330)430-6190
FAX: (330)430-6199

CERTIFICATE OF CONFORMANCE

M & M

I hereby certify that on 02/14/07 Airfasco Industries provided the supplies called for by Contract/ PO Number **0AW362** in accordance with all applicable requirements for shipment. I further state that the process certifications are in conformance with the contract requirements, including specifications and/or drawings, physical item identification (part number) and the quantity shown on this or attached acceptance document. The part numbers certified below have been manufactured in the United States. DFAR 252.225-7014 ALT 1 compliant in fastener base raw material melt source only, with heat number and country, does not include the post cadmium metal plating


WM. DENT

Quality Assurance Representative

PART NUMBER	LOT NUMBER	QUANTITY	PART NUMBER	LOT NUMBER	QUANTITY
AN4-12A	12564	104575			